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NORSERY SCHOOL PROCEDURE

NURSERY SCHOOL PROCEDURE

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PREFACE

One of the outstanding educational developments in recent years is the growing interest in young children and the provision of special facilities for their education. In several countries an institution called the nursery school has arisen. The movement is in part an outcome of the growing recognition of the educative importance of desirable habits and attitudes and the realization that many of these are implanted early in life; in part a result of the conditions of the present-day home. Traditionally, the mother is the person responsible for the early training of young children and frequently in actual practice she is the logical person to fulfill this function. With the speeding up of modern life, the cramping of living accommodations into small city apartments and the disappearance of the spacious back yard, however, she is handicapped in her efforts. That the nursery school fills a need in supplementing the work of the mother, or even in replacing it in the case of the working mother, is demonstrated by the astonishing growth of the movement within the last few years. Five years ago it was possible to enumerate the nursery schools in this country; to-day that person would be rash who would attempt to list more than those connected with the colleges and universities. With the phenomenal increase in the number of schools has come a sudden demand for trained workers and a need for books that present the essentials of nursery school procedure.

The present volume is planned for the use of university and normal school students who are working with children of preschool age. Since a discussion of the forerunners of the modern nursery school has been presented in other books, our efforts have been confined to a presentation of the conduct of the American nursery school. Our aim has been to present a brief handbook from which the student or parent may learn of the methods used in nursery schools and to which the teacher may turn for reference and suggestion.

We have included such experimental data as has seemed of particular importance to the nursery school teacher. The methods discussed and suggested are based not upon theory, but upon actual experience in the nursery school.

The authors wish to thank the following persons for reading and criticizing various parts of the manuscript: Dr. Edith Boyd, all parts relating to the physical development of the child; Dr. Richard M. Elliot, the chapter on the preschool child; Mrs. Sue A. Cory, the section on music; Miss Bertha B. Hays, the chapter on food and cating habits; and Dr. John E. Anderson, Miss M. Adelia Boynton, and Dr. Florence L. Goodenough for many suggestions throughout the entire book.

J. C. F. M. L. M.

EDITOR'S INTRODUCTION

The nursery school is not a new institution. The idea was known to the Jews of ancient times. The Roman who was still a Roman, free from Hellenic influence, provided a ludus, a play place, for his young children. Comenius' School of the Mother's Knee may bear no outward resemblance to the modern nursery school, but the two reveal a significant kinship in spirit and purpose. Robert Owen's shortlived Infant School in the mill town of New Lanark was a pioneer achievement in the development of institutions for children of preschool age.

The nursery school of the past did not survive because of hostile social and economic conditions or because of unfriendly educational attitudes. In contemporary education, however, it bids fair to become prominent because of new attitudes and new conditions.

Modern psychology has no uniformly accepted explanation of human behavior, but all schools of psychological thought ascribe unprecedented significance to the first five years of life. Impressions and experiences of the early period develop habits and attitudes which not only shape the mind but also determine an individual's entire set of values. Our likes and our dislikes, our fears and our aspirations, our feelings of inferiority or superiority, our indifference to, or excessive concern with, matters of health—all these basic attitudes towards life have been conditioned in the initial years of living. From the ages of 6 to 14, the school trys to maintain helpful supervision of each child. Attendance at school is compulsory and can be en-

forced by the law of the state. After leaving school, youth finds social agencies—volunteer agencies, to be sure—that tempt him to join a club, a gymnasium class, a religious class or any one of the many specialized activities commonly found in a social center. Evening high schools, continuation schools, and trade schools extend a welcome hand to the youth who leaves school upon meeting the local compulsory educational age. Formal or informal supervision up to the age of 17 or 18 is usually maintained by a modern progressive community.

But what of the little child who has just learned to walk and talk? What if his environment is drab; what if it provides no opportunity for the companionship of other children; what if play space is limited to the less dangerous places in the kitchen or the sidewalks of a busy town; what if his home cannot exercise the proper supervision of his diet, his rest periods, and his bodily functions? These vital years, when guidance is most needed, are left to the caprice of circumstance. How to rid growing boys and girls of undesirable physiological habits, of unsocial attitudes and of perverted values is a task that challenges modern education. The nursery school, properly organized and intelligently supervised, becomes a great preventative institution, fraught with promise for mental as well as bodily hygiene.

Changing social and economic conditions of our day undoubtedly encouraged the development of the nursery school. The intelligent mother whose vocation prior to her marriage was as lucrative and as satisfying as her husband's is often loath to give up, for all time, her calling or her profession. Although she accepts the obligations of home and motherhood, she cannot become reconciled to a relentless routine of imperative tasks which can be done as well for her by women of less mentality and sturdier

backs. She sees about her middle-aged women with families no longer dependent on them who cast about for some form of occupation. She takes warning from them and draws a sharp distinction between home-making and house-keeping. The former, she gladly undertakes; the latter, she wisely transfers to shoulders more suitable than hers. To such a mother, a nursery school administered by a staff of professionally trained workers is an avenue of escape from a regimen of housekeeping that is physically exhausting and mentally stupefying.

Parents who look to the nursery school are not shirking their obligations to their children. On the other hand, they may be insuring their children of preschool age early training in social adjustment, and opportunity to develop habits of self-reliance in eating, sleeping, playing, and in attending to personal needs—conditions not always possible in a well managed home. Protracted unbroken contact between parents and children is not desirable for either the old or the young.

Nursery School Procedure does more than the title imaplies. The authors set forth, systematically and in detail, the psychological and physiological characteristics of early childhood. Here they have not failed to utilize the results of many of the recent experimental studies. Not until they define childhood, as objectively as circumstances permit, do they work out a regimen of child care for the nursery school. In making suggestions for feeding, clothing, sleeping, play, and creative activities, the authors present more than personal opinions of people experienced in child care. They consistently check their own recommendations with the findings of those engaged in researches in child care. Parents as well as teachers interested in keeping very young children mentally and physically healthy will find Nursery School Procedure a reliable and helpful guide.

Those in charge of nursery schools as well as those who care for the children in these schools may approach this book with confidence that they will find practical help in the many problems of equipment and procedure which confront them daily.

The authors of Nursery School Procedure make their exposition simple and direct. They have not encumbered their book, which in many respects is a pioneer achievement, with needless technical terminology. They are firm believers in the nursery school, but their writing is always critical and dispassionate. Never are they propagandist. They are ever ready to admit the significance of home training, but they are not blind to the need of supplementing the child's routine with experiences that make for ready social adjustment in a world that is decidedly bigger than the family; they set forth the contribution of the Frocbelian kindergarten and the Montessori classes, but they recognize the needs of the child who is too young for the formal programs of these two schools. Their selected bibliographies are designed to stimulate further study and to lead the reader to react intelligently and critically to the program they sponsor.

PAUL KLAPPER.

CONTENTS

PAGE

PREFACE			v
Editor's Introduction		. ,	vii
CHAPTER			
I. THE NURSERY SCHOOL ORGANIZATION			1
The aims of the nursery schools			1
Types of nursery schools	:	:	1555789
Introduction			5
The research nursery school			5
The teacher-training nursery school			7
The home economics nursery school			8
The social service nursery school		•	
The behavior problem nursery school	-		10
The cooperative nursery school	•		10
The summer school nursery school	•		11
The nursery school as part of the kindergarten	•		11 12
The private nursery school Variable features of nursery schools	•		12
The staff of pursery schools	•		14
The staff of nursery schools	•		15
The medical adviser	•		16
	•		18
The head teacher	-		19
The assistant teachers			20
II. The Nursery School Child	•	-	23
Physical development			23
Motor development			26
Mental development			26
Emotional development	•		28
Social development	•	•	29
Development in play	•	•	30
III. THE EQUIPMENT OF NURSERY SCHOOLS			34
Building and grounds			34
The playground			34
The garden			35
The garden Provision for active play Wildownell			36
Wild animals			36
Wild animals			37
Yi			

CONTENTS

xii

The building	CHAPTER												PAGI
The building	The re	oof											37
The play room	The b	uilding .											38
The locker room	The p	lav room											38
The sleeping room The nurse's room The dining room The kitchen The free play period The free play period The play The music period The	The lo	nekar roor	n										38
Play materials	The sl	ecoing roo	om								_		39
Play materials	The n	urse's roo	m			Ţ.	Ĭ.		•	Ī.	-		
Play materials	The d	ining roon	1	•	•	•	•	•	•	٠		•	
Play materials	The tr	itchen		•	•	•	•	•		•	•	•	
Play materials	Furnishi	nge .	•	•	•	•	•	•	• •	•	•		
Apparatus for very active play Blocks Dolls and materials for doll play Animals Puzzles S7 Sand Clay S8 Water Beads and pegs Paper work Chalk Chalk Sewing Books Pictures The nursery school program The free-play period Experimental data Block play Doll play S2 Sand play Clay play Play with gymnasium apparatus Table play Play with rucks Water play Use of other materials Conduct of the free-play period V. Play, Music, and Language Activities of the Organ The music period V. Play, Music, and Language Activities of the Organ Types of organization The music period 98 The music period	Dlay me	ngs	•	•		•	•	•		•	•		
Apparatus for very active play Blocks Dolls and materials for doll play Animals Puzzles S7 Sand Clay S8 Water Beads and pegs Paper work Chalk Chalk Sewing Books Pictures The nursery school program The free-play period Experimental data Block play Doll play S2 Sand play Clay play Play with gymnasium apparatus Table play Play with rucks Water play Use of other materials Conduct of the free-play period V. Play, Music, and Language Activities of the Organ The music period V. Play, Music, and Language Activities of the Organ Types of organization The music period 98 The music period	Conor	i l'equirer	noni	e of	nlos		toni	o le	• •	•	•		
Blocks	A	n requirer	116111	9 OI	bran	.1	. (. C:1 1	aus		•	•		
Dolls and materials for doll play	Appara Dil	atus for v	ery	acu	ve j	пасу	•	•		•	٠		
Animals Puzzles Sand Clay Sand Clay Water Beads and pegs Beads and pegs Beads and pegs Beads and pegs Beads	Blocks	3	. ;		, ,,	, .	•	•		•	٠		
Puzzles	Doils	and mater	ais	ior (1011	раху	•	•		•	٠	٠	
Sand	Anima	ıls	•	•	•	•					٠	•	
Clay												•	
Water 59											•	•	
Beads and pegs	Clay										•		
Paper work													
Tools	Beads	and pegs											
Tools	Paper	work .											
Paints 61 Chalk 62 Sewing 62 Books 62 Books 62 Pictures 64 IV. The Nursery School Day 68 The nursery school program 68 The free-play period 72 Experimental data 73 Block play 81 Doll play 82 Sand play 83 Clay play 85 Play with gymnasium apparatus 85 Table play 87 Play with kiddy kars 87 Play with trucks 88 Water play 89 Use of other materials 89 Conduct of the free-play period 90 V. Play, Music, and Language Activities of the Organ- IZED Group 93 Types of organization 93 The music period 98	Tools												61
Chalk													61
Sewing G2 Books G2 Books G2 Books G2 Pictures G4	Chalk												62
Books													62
Pictures 64 IV. The Nursery School Day 68 The nursery school program 68 The free-play period 72 Experimental data 73 Block play 81 Doll play 82 Sand play 83 Clay play 85 Play with gymnasium apparatus 85 Table play 87 Play with kiddy kars 87 Play with trucks 88 Water play 89 Use of other materials 89 Conduct of the free-play period 90 V. Play, Music, and Language Activities of the Organ- IZED Group 93 Types of organization 93 The music period 98													62
IV. The Nursery School Day 68 The nursery school program 68 The free-play period 72 Experimental data 73 Block play 81 Doll play 82 Sand play 83 Clay play 85 Play with gymnasium apparatus 85 Table play 87 Play with kiddy kars 87 Play with trucks 88 Water play 89 Use of other materials 89 Conduct of the free-play period 90 V. Play, Music, and Language Activities of the Omian- IZED Group 93 Types of organization 93 The music period 98	Picture	es											64
The nursery school program													
The nursery school program	IV. THE NURS	ERY SCHOO	l D	AY .									68
The free-play period	The nur	some schoo	l pr	חסיוים ו	m								68
Experimental data 73 Block play 81 Doll play 82 Sand play 83 Clay play 85 Play with gymnasium apparatus 85 Table play 87 Play with kiddy kars 87 Play with trucks 88 Water play 89 Use of other materials 89 Conduct of the free-play period 99 V. Play, Music, and Language Activities of the Omian- IZED Group 93 Types of organization 93 The music period 98	The free	nainy nor	iod	ogra		•	•	•	•	•	•		
Block play													
Play with kiddy kars	Blook	nless	aua	•	•	•	•	•	•	•	•	•	
Play with kiddy kars	Doll	liay .	•		•	•	•	•	•	•	•	•	
Play with kiddy kars	Don I	nity	•		•	•	•	•	•	•	•	•	
Play with kiddy kars	Olum	pray	•		•	•		•	•	•	•	•	
Play with kiddy kars	Olay I	nay	<u>:</u>	• •	•		•	•	•	•	•	•	
Play with kiddy kars	riay w	nth gymn	usiu.	m aj	ppgr	auns	•	•	•	•	•	•	
Play with trucks 88 Water play 89 Use of other materials 89 Use of other materials 89 Conduct of the free-play period 90 90 V. Play, Music, and Language Activities of the Organization 93 Types of organization 95 The music period 98 98 99 99 99 99 99 9	Table	play	'1		-	•	•	•	•	٠	•	٠	
Water play Use of other materials	Play v	viin kiaa	y KE	ırs .	•	•	•	•	•	•	•	٠	
V. PLAY, MUSIC, AND LANGUAGE ACTIVITIES OF THE ORGAN- IZED GROUP	Play w	vith truck	s.		•	•	•						88
V. PLAY, MUSIC, AND LANGUAGE ACTIVITIES OF THE ORGAN- IZED GROUP	Water	play	٠.		•								89
V. PLAY, MUSIC, AND LANGUAGE ACTIVITIES OF THE ORGAN- IZED GROUP	Use of	other ma	teri	als .		٠	:						- 89
V. PLAY, MUSIC, AND LANGUAGE ACTIVITIES OF THE ORGAN- IZED GROUP	Condu	ct of the	frec	-play	, pe	riod							90
IZED GROUP													
Types of organization	v. PLAY, MUS	SIC, AND I	ANG	UAGI	A (TIVI	TIES	OF	THE	()1	CAN	i –	
Types of organization	ized Gro	our				•							
The music period	Types of	i organizat	ion										95
0 1 · · · · · · · · · · · · · · · · · ·	The mus	sic period			_								റ്റമ
Selection of music	Selecti	on of mu	ısic										99

CONTENTS	3							xiii
CHAPTER								PAGE
Responses to music								101
The band		•	•	•	•	•	•	102
Singing	•	•	•	•	•	•	٠	102
Singing		•	•	•	•	•	•	
Musical appreciation	•	•	•	•	•	•	•	104
Musical games		•	•	•	٠	•	•	105
The language period		•	٠	•	•	•	٠	105
VI. HABITS OF CLEANLINESS AND ORDE	ır.						_	115
Experimental data			-		-	-	-	116
Experimental data	•	•	•	•	•	٠	•	
Aids to habits of orderiness .	•	•	•	•	•	•	•	117
Standards of cleanliness		•	•	•	•	•	•	118
Care of clothing		•	•	•	•	•	•	119
Hair-combing							•	120
Hair-combing								121
Tooth-brushing								122
Face-washing								123
Face-washing								124
Baths				_				125
Baths					·	•	•	125
Bladder control		•	•	•	•	•	•	127
Diadder Collinoi	•	•	•	•	•	•	•	124
VII. FOOD IN THE NURSERY SCHOOL								131
Experimental data								133
Experimental data	•		•	•	•	•	•	137
Section amangament for lune	hoo		•	•	•	•	•	139
Seating arrangement for lunc	neo	ш.	•	•	•	•	٠	
Luncheon service	•		•	•	•	٠	•	139
Formality at the luncheon tab	le .		•	•	٠	•	•	140
Aims of the luncheon hour				•	•	•		140
Food intolerance	•					•		141
Non-hunger								141
Special likes and dislikes .								142
Slow and rapid eaters								143
Table manners		_		_				144
$egin{array}{ccccc} T_0 & & & & & & & & & & & & & & & & & & &$	•			-	Ĭ.		•	144
· · · · · · · · · · · · · · · · · · ·	•	•		•	•	•	•	
VIII) SLEEP IN THE NURSERY SCHOOL								147
						•		147
Experimental data The morning rest period	•	•		•	•	•	•	150
The morning rest period	•	•		•	•	•	•	
The sleeping arrangements .	•			•	•	•	•	150
The nap hour	•	•		•	•	•	-	151
The child who does not sleep The child who disturbs others					•	•	•	152
The child who disturbs others	;							152
Undesirable habits at nap tin	nе							153
IX. Training in Social Habits .				•	•		•	155
Self-help								156
Use of leisure time								158
Adjustment to the group								159
Trainparters of are Proub.	-	-	•	•	,	-	•	,

CONTENTS

xiv

CHAPTE	R						PAG
	Language as a form of social intercourse						163
	Emotional control						163
	Behavior problems						16
	Negativism Thumb-sucking Handling genitals Temper tantrums Anti-social behavior						16
	Thumb-sucking						166
	Handling genitals						167
	Temper tantrums						168
	Anti-social behavior						168
	Fears						170
	Jealousv						170
	Jealousy						170
\mathbf{X} .	CLOTHING FOR THE PRESCHOOL CHILD .						17:
	Experimental data						17:
	Choice of material						176
	Warmth of clothing						177
	Angorntion of moisture						178
	Cleanliness of clothing	•	-	•	•	•	178
,	Durability	•	•	•	•	•	178
	Durability	•	•	•	•	:	
	Clething to promote self help	•	•	•	•	•	179
	Clothing to promote self-help Suggested costumes	•	•	•	•	•	181
	buggested costumes	•	٠	٠	•	•	101
XI.	NURSERY SCHOOL RECORDS		_	_			185
	Decards for the nevert	•	-	•	•	•	185
	Records for the parent	•	•	•	•		186
	Records for the teacher	٠	•	•	•	•	187
	Records for other workers	٠	•	•	•	٠	
	Records of attendance	•	•	•	٠	٠	188
	Records of physical condition	•	•	•	•	•	188
	Records of mental examinations	•	•	•			190
	Records of behavior at school	•	•	•		•	191
	Records of the child at home Annual or semi-annual reports	•	•	•	٠	•	194
	Annual or semi-annual reports	•	•	٠	٠	٠	194
XII.	THE NURSERY SCHOOL AND THE HOME .			_			198
	Advantages of the home					•	198
	Advantages of the school	•	•	•	•	٠	199
	Advantages of the school	•	•	•	•	•	201
	The selections of between school and parents	•	•	•	•	•	205
	The school and other parents	•	•	•	•	•	200
XIII.	THE NURSERY SCHOOL AND THE KINDERGARD	EN					207
	Influence of kindergarten on nursery sch						208
	Distinctions between nursery school and l						210
	Problems of adjustment between nurser						ادعا
	1-11	•					211
	kindergarten	•	•	•	•	•	213
	bolumon of the problem	٠	•	•	•	٠	215
INDEX							215

NURSERY SCHOOL PROCEDURE

CHAPTER I

THE NURSERY SCHOOL ORGANIZATION

THE AIMS OF THE NURSERY SCHOOLS

WITHIN the last few years hundreds of nursery schools have sprung up all over the country. These schools are designated variously as "nursery schools," "play schools," "preschool groups," "prekindergartens" and the like. The groups, the aims, and the staffs are as varied as their names. Their one similarity is their attempt to provide a good environment for children not yet old enough to be in the public schools.

Whatever else a nursery school tries to do, it has no right to exist unless it is able to furnish an environment which is beneficial for its children. This environment must include such obvious items as the correct temperature and humidity, a great deal of sunshine and fresh air, the right kind of food if any meals are served, plenty of water to drink, a chance to rest lying down, protection from contagious disease, treatment for minor injuries, comfortable and suitable clothing. There should be play materials that encourage strenuous but not straining play, other play materials that encourage self-expression, the development of imaginative concepts, the acquisition of information, and so on. The environment must also provide opportunity for many kinds of habit training. During the early years of his life the child acquires habits rapidly. If left to himself, he will develop some good, some bad, and some indifferent habits. The good home and the good nursery school will foster the development of the best habits and will prevent or at least hinder the development of undesirable habits. Some of the habits which are to be cultivated are those relating to personal hygiene, to eating, to sleeping, to desirable attitudes toward the individual himself and toward his fellows. The teacher and the wise mother encourage the child to learn to help himself and not to rely too greatly on the assistance of others. They teach him to prefer a clean body, and to continue his matter-of-fact attitude toward toilet processes. They guide him into acceptable social behavior, through such steps as learning to take turns and learning to differentiate between what is his and what belongs to another. They encourage him to stand up for himself without intruding on the rights of others. They help him to acquire emotional control and to direct his emotional reactions in acceptable ways. The school, to a greater extent than the modern home, provides a wide range of experience through stories, pets, expeditions, and through many kinds of play material. The school tries to provide such varied means of expressing ideas through all sorts of plastic and construction material that each individual child will be able to select the occupation in which he is most interested and in which he is most able. In these ways and in many others the nursery school tries to supply the child with an environment which is as nearly ideal as possible. In a group an occasional child may fail to get the individual attention which he needs or an occasional child of nervous temperament may be overstimulated. In general, however, the advantages derived from the social contacts with other children and the learning to get along without the constant presence of a member of the family outweigh minor disadvantages.

Some of the small private nursery schools are satisfied when they have fulfilled the requirement of benefit to the child, but the larger nursery schools, particularly those connected with other educational or social institutions, commonly include other projects as well. Probably the most common of these interests is in parental education. Whether or not the school is definitely committed to a parental education program it cannot fail to have considerable influence at least upon the parents of its own children. The parent who sees his child thriving in the environment of the school. gaining in weight and appetite, happier, and more easily controlled, will be interested in the type of training which brought about this change. The casual contacts with the nursery school and its staff, such as occasional visits, conversation with the teacher when bringing the child to school and conferences with some member of the staff about home problems, prove to be effective methods of parental education. In addition to this sort of incidental influence, many schools have worked out a program of parental education directed towards the parents of the nursery school children. to parents in general and to girls who may be expected to marry within a few years. Such parental and preparental programs may be limited or extended, but they all hope to help the parent by furnishing information, suggestions, or new points of view.

Considerable good in the way of parental education may be provided simply by opening the nursery school as a demonstration or observation center. There are many adults within access of every nursery school who would be eager to profit from observing trained teachers handle children. Mothers and fathers of the children in the school frequently get a less biased view of their own children when they actually see them in a group of their peers. The mother who insists that certain performances are too difficult for three-year-old children because her own three-year-old is unable to perform them, frequently revises her opinion when she

sees most of the other children of that age in the group performing the task with ease. The mother who considers her son a "bad actor" learns sometimes that he is acting only as most other boys of his age act and that he is easier to control when he is given opportunity for frequent vigorous activity. Other mothers not connected with the nursery school group may benefit almost as much by watching the children in the nursery school. Any intelligent woman who visits a well-run nursery school will gather many ideas on child care and training. A third group who gain much valuable information and many new points of view from visits to the school are college and high-school students. This group at present is limited almost entirely to girls. The nursery school provides an excellent opportunity, too little appreciated, for the budding pediatrician or children's dentist, for young women expecting to marry shortly, for girls planning to be governesses and for teachers of the early grades in the public schools. Some nursery schools offer both theoretical and practical training to mothers, prospective teachers, nurses, research workers and the like. The theoretical training should be supplemented by actual contact with children so that the worker may try out her theory and acquire skill and confidence. Such students are usually taken into the school in small numbers under close supervision as student assistants. In this way the nursery school may become a means of training professional workers in various allied fields which pertain to the preschool child.

Many of the larger nursery schools spend considerable effort in acquiring knowledge about the preschool child. It is only within the last few years that we have been able to obtain any reliable data on large numbers of young children. Up until that time we had only incidental notes or diaries on a few individual children. But now the larger

nursery schools are collecting large masses of data on physical, mental, emotional and social development. We no longer have to go entirely on guesswork when we plan the child's meals, his sleeping hours, his habit training. This research work helps the teacher in training by making her a better observer of children; and it helps the parents by furnishing the basis for study and guidance of their own children.

Types of Nursery Schools

Introduction. It is, perhaps, unnecessary to say that no two nursery schools are exactly alike. Indeed a series of visits to a dozen or so schools frequently leaves the impression that there are as many kinds of nursery schools as there are individual schools. A few types, however, stand out. These types are not clear-cut; they overlap and some of them may be considered abstractions in the sense that no actual school will be found which belongs to that type and that one alone. Moreover it is quite possible to find two nursery schools belonging to the same general type but very different in atmosphere and conduct. Minor differences arise between schools and between successive years in the same school due to changes in the group of children and in the personnel of the staff. All the present summary can hope to do is to indicate certain rather broad features or trends of the present-day nursery schools.

The research nursery school. Research centers are almost necessarily connected with colleges or universities since the persons employed in research on young children are usually psychologists, sociologists or pediatricians and the great mass of such research can be carried on only under some "foundation" or in connection with the work of some university/The characteristics of the individual research school will depend on the major kinds of research in progress.

The school interested chiefly in physical growth and health problems will differ somewhat from the school more interested in problems of social adjustment, children's learning, and the treatment of behavior problems. The time which the child spends at the school will vary with the research problems. Some investigations require twenty-four-hour residence, some a six- or seven-hour school day, and some are satisfied with merely a morning or an afternoon session. In most research centers the children in the school are selected in order to obtain a particular group. The school may desire to have all children in excellent physical condition, all children of superior intelligence, all twins, all children within a very limited age range, or a group scattered throughout the social scale. To take one school for example, the nursery school at the Institute of Child Welfare at the University of Minnesota selects its children on the following bases: All children must live in a limited district near the University because the Institute provides transportation to and from school. All children must give evidence of normal mental and physical development. Of the 36 children in the school, approximately 14 are four years old, 14 are three years old and 8 two years old. The group is divided equally between boys and girls. Since the group is planned to represent a cross section of the whole city, the percentage of children coming from each of six occupational classifications is kept as closely as possible to the percentage of males in the city belonging to those classes at the time of the last census. When the group of applicants is narrowed down by the restrictions just stated, this school then selects the applicant who is in the best physical condition.

Good cooperation on the part of the parents is necessary in most research schools. Frequently the school will need certain home records or will want to examine the child before breakfast or at some other unusual time. The research is apt also to affect the schedules of teachers and children. If the teachers are expected to carry on any of the research they will need to have some special training and a larger staff will be required. The schedule of any child in a research school is likely to be somewhat interrupted since some kinds of research necessitate removing the child to a special room or to some prearranged situation. This may mean that some research schools furnish a more stimulating environment than some other schools.

The teacher-training nursery school. The nursery school which provides opportunity for the training of teachers must of necessity be connected with some college or institution. The nursery school itself can scarcely supply all the foundation courses which are desirable for the teacher in training.

The nursery school which provides for teacher-training will ordinarily be found to have a more definite, more clearly defined educational policy than some of the other schools. This is probably particularly true of the nursery schools which are part of a large teachers' college or normal school.

The staff of this type of school need higher training than that of the ordinary nursery school teacher, since they will be required to teach groups of college or normal-school students. The number of persons required on this staff will depend on the amount of use that is made of student assistants but, in any event, there should be enough teachers to provide for close supervision of the student assistants.

The building should be arranged to allow the practice teacher to have a small group of children in a room by herself, away from possible visitors or observers. The beginning teacher frequently needs to gain self-confidence in the control of a group of small children and this is much more easily done when the situation is simplified as much as possible and when there are no outsiders to embarrass the new teacher or to distract the children.

The selection of children for the teacher-training school is unimportant except that it should provide a wide variety. The students should have experience with both sexes and different ages. They should become well acquainted with children from various kinds of homes, the very poor, the well-to-do, the oversolicitous families and the families who are not sufficiently interested in their children. They should have experience with a variety of problem situations, and this experience should preferably be varied enough to demonstrate that not all thumb-suckers, for example, should be handled in the same way.

The home economics nursery school. In many colleges, the department of home economics conducts a nursery school as a sort of laboratory course in child care and training. The purpose of these schools is chiefly to give information and training to girls who are expecting to marry, to girls who are planning to teach home economics in high schools, and to other home economics teachers who are conducting classes on home and family problems. In such schools the selection of the children is important only in providing as much variety as possible. The staff is usually selected on the basis of their ability to handle young children and to conduct conference groups of observing students.

Home economics nursery schools are also found in connection with some of the larger high schools. Here, too, the work is preparental in character. The students are encouraged to take a "little mother" or "big sister" attitude in the hope that they will continue this attitude toward their younger siblings at home or toward their own children in later years.

The social service nursery school. Under this heading we may include all the schools whose chief interest is the alleviation of unfortunate conditions surrounding the children. In this group would fall nursery schools which have developed out of the old day nurseries, schools based on the idea of the English nursery schools, schools connected with settlement or neighborhood houses, and schools arising in connection with orphans' homes, etc. One of the outstanding schools of this group is the Nursery Training School on Ruggles Street in Boston. The common characteristics of such schools are first that they are free or charge a minimal fee and second that many of the parents whom they reach are very poor and often very ignorant. One of their biggest problems is the education of the parents. Indeed, Abigail Eliot of Ruggles Street School goes so far as to say, "There is no use trying to do good work with children in the nursery schools unless the parents' aims and methods at home are in harmony with the aims and methods of the nursery school."

Such schools are very likely to have many children in poor physical condition and for this reason an allied clinic is almost essential. Further problems which will frequently arise are the question of other meals beside lunch, met by some schools by taking the children for the full day and providing three meals; the problem of clothing, met by some schools by providing a school uniform which is worn only at school; and the problem of the working mother and the consequent necessity for caring for children with mild illnesses or illnesses developing suddenly during the day when the mother is off at her work, met by some schools by an "isolation room." Such a school must be conducted from a point of view quite different from that of schools having a more favored group of children, and in such schools lie some of the biggest

opportunities for the trained nursery school teacher today.

The behavior problem nursery school. Schools which are primarily interested in behavior fall roughly into two classes: those which take cases referred to them solely for the sake of the child himself and those which combine their service to the child with a demonstration center for the illustration of the handling of different types of problems. The first of these two types may happen to have at one time only a few kinds of problems; the second type selects its children in order to illustrate a variety of problems. In such a school the selection of the staff is extremely important. The person in charge should have some psychiatric training, and the assistants should be trained to follow a predetermined procedure in the case of each individual child, since too many methods of combating any bad habit, when applied simultaneously, may result in failure. In other words, there must be careful coördination of the work of all the staff and a definitely defined and strictly followed policy for handling each child. These schools ordinarily need more teachers per child and many more staff conferences than other schools. The attendance of the child at the school is usually determined by the improvement shown by the child. Sometimes the child may be kept overnight for a time; other children may be asked to continue their attendance at the training school half the day while they go to public school during the other half.

The coöperative nursery school Since the coöperative nursery school arises from the demand and the personal interest of the mothers, its characteristics are necessarily determined by the mothers and not by a group of scientists, social workers or teachers. The coöperative nursery school at the University of Chicago is one of the oldest and a good example of this type of school. The group of children in

attendance and the surroundings and furnishings of the school are determined by the financial status and interest of the families concerned. The staff should include at least one trained nursery school teacher (and more if the school is large) and assistants whose number will depend on the amount of service given by each mother. The amount of parental education work and child study carried on will depend on the interest, ability and time given by the mothers.

The summer school nursery school. Many schools not conducting a nursery school as part of the regular program are offering one for the summer session. These summer nursery schools may be of any of the kinds outlined above, though they generally are but little concerned with research. One of the most interesting kinds so far developed is that in which the well educated mother is offered the opportunity of studying along the line of child development and home-making while her preschool child attends the nursery school. In such an instance the mother renews her college contacts, learns much of theory and practice of child training, sees her child in comparison with others of his age and has a vacation from the actual care of the child; the child meanwhile benefits from the usual advantages of the well-conducted nursery school.

The nursery school as part of the kindergarten. The demand of parents has compelled certain schools, chiefly large private schools, to admit children below the usual kindergarten age./Such children are often placed in a "pre-kindergarten" group. A few cities now provide a two-year kindergarten course and admit children a year earlier than formerly/Unfortunately the work provided is frequently in the hands of a trained kindergartner who lacks nursery school experience and who gives the children merely a somewhat simplified kindergarten program./The person in

charge of this group should have training in both kinder-garten and nursery school work. The value of such a school for the nursery school child depends entirely on the policy and training of the teachers.

The private nursery school. Private nursery schools are, of course, extremely varied, though practically none belong to the research and social service types. Most of them attempt to make money for the director and a few succeed. At the present time only parents who are comfortably well off can afford to pay the tuition which is necessary to keep a good nursery school on a paying basis. Anything less than a well-conducted school, run by a trained teacher, is merely a "parking place" for small children and has few advantages over play with other children at home. The special characteristic necessary for a well-trained successful director or head teacher in a good private nursery school is the ability to make good contacts with the homes and to insist on correct standards for the school in the face of the possibility of the withdrawal of certain children.

Variable features of nursery schools. Even after the main type of the nursery school has been determined, there are many features which vary from school to school and which may change from time to time within any one school. There is, for example, the difference between the "outdoor" nursery school and the school which is not so definitely committed to the open air emphasis. In this distinction, determining factors may be the climate, the amount of research which necessitates the presence of the child indoors and the style of building which makes for easy or difficult access to the playground.

The basis for admission to the school is a variable feature which has already been mentioned and is closely connected with the question of whether the school is free or self-supporting or money-making. Another feature which

is more or less tied up with the question of fee is the means of transportation of the children. In some schools the children come alone, in others they are taken to and from the school by some member of the family, and in still other schools, bus or taxi transportation is provided by the school.

The length of the school day is another variable feature. Many schools are open only for the morning session; others offer two sessions, either to two different groups or to the same group, but provide no luncheon; others have a full six- or seven-hour day with luncheon and opportunity for naps provided; others run a twelve-hour day, with or without meals other than lunch; and still others which are really "homes" rather than "schools" keep the children for the full twenty-four hours. In connection with attendance another variation arises. In some schools, particularly the research type, the children are expected to be at school every day when they are not ill; in others, particularly the day nursery type, the children come to school only on certain days each week; and in a few private nursery schools, the child is at school only on days when the mother chooses to leave him there and the mother pays only for the actual time when the child is at school. Such a place as the last suggested should not really be called a nursery school.

The actual conduct of one school may differ markedly from that of another. This difference may be determined in part by the kind of materials provided, as for example, Montessori material, simple kindergarten material, material devised for the particular school, etc. The difference may lie in the formality, insistence on routine and so on, with which the school is run. Generally speaking, the characteristics of any nursery school depend on the aims of the director, the desires of the parents, and the personalities and training of the teachers.

THE STAFF OF NURSERY SCHOOLS

The staff necessary for a nursery school will vary with the type and size of the school. The nursery school associated with the Bureau of Educational Experiments in New York City provides two teachers always on duty with a group of eight children. Other schools think that one teacher can handle ten children. None of the schools in this country attempts anything like the number of children which some of the English schools have under the charge of one teacher. The number of teachers on hand at one time depends in part on the age of the children in the group. One teacher can adequately supervise fewer children of age two than of age four/ The two-year-olds, according to the evidence of the teachers (though we have so far no measure of this), take much more attention than the older children. The number of teachers on duty depends also somewhat on the plan of the school building. A building all on one floor where the rooms are large or open into each other in such a way as to give clear vision of all parts of the rooms will require fewer teachers than a school where the children are scattered among separate rooms and on different floors, or where there are many halls and nooks which require oversight. The number of teachers necessary varies also with the schedule of the school. Relatively few teachers are required for the free play period, many are needed for the luncheon period when four children are about all any one teacher can control and guide. More teachers are needed also at certain other special times, such as the hour for putting on wraps for winter outdoor play in a school situated in the north where leggings, sweaters, mittens and galoshes are necessary.

Whether the school be a large or small one, there are certain responsibilities which must be assumed by some

one. There must be some one who is responsible for the general conduct of the school as a whole, some one who is responsible for the health of the children, some one who is responsible for the food if luncheon is served, and some one who is responsible for the various activities of each child during the day. These duties may in a very small, very simple school be assumed by one person. In the larger school, they may be divided among many.

The head of the school. The responsibility for the general conduct of the school may rest with a board of directors, a principal, or a head teacher. The duties of the head of a nursery school will vary so greatly from school to school that we can do no more here than suggest some of the possibilities. Some principals will be found who turn their hand to almost anything from ordering safety pins to arranging menus, to substituting for any member of the staff who is absent, to interviewing overanxious parents who feel sure their child is headed for the reform school. The qualifications desirable in the head vary, of course, with the duties which she or he is expected to perform. A school which is used largely for research needs a research-trained person at the head. The head of a school is in a good position to see problems which are available for investigation and frequently is able to investigate some of these questions herself. The research-trained head is also in closer sympathy with the other research workers, understands their problems and can foresee and smooth out many difficulties which the person out of touch with research fails to comprehend. The large school which fulfills many functions will of necessity require much administration and the head of such a school should be one who can keep many details in mind and act as an "oiled feather" for all the intricate parts of the school's machinery. The school which centers its interest in behavior problems needs a head who has had some sort of psychiatric training, perhaps some training in social service. She must see the factors which may underlie the child's behavior and be familiar with the most successful methods of handling such a situation. She must also be able to meet the parents of the children in such a way as to enlist their help and at times revise their attitude toward their child. A school which trains nursery school teachers needs at the head a person of broad training and interest and a person who is a good teacher for young women. A small private nursery school needs a tactful teacher of several years' experience. She should also preferably be sufficiently trained to recognize the main symptoms of the common contagious diseases of children. The cooperative nursery school in which the mothers act as part-time assistants needs a teacher of considerable experience who has had some work in parental education. Many other desirable qualifications could be suggested, but since all the desirable qualities are practically never found in one person, each school will select, of course, the kind of person which best suits its aims.

The medical adviser. The responsibility for the health of the children may rest with a pediatrician, with a trained nurse or with trained teachers. The best equipped schools will use the services of all three. It cannot be stated too strongly that no school is a desirable place for preschool children which lacks an adequate daily medical inspection. The nursery school children are at an age when contagious diseases are particularly common and when the sequelæ are frequently serious. Many of the children have associated up to this time almost entirely with adults, have never been in close contact with other children, and have failed to build up any immunity for the diseases current among children. The school must, therefore, attempt to prevent the occurrence of any one of the diseases in any one of the children. The medical profession has long since abandoned

the notion that it is an advantage to have the contagious diseases early in life. Moreover many minor defects can be remedied at this time, when if neglected they may become serious and have lasting effects. Not only are the preschool years the ones in which the child's health must be most carefully guarded, but they are also the years in which the families should be taught the principles of public health. Never again, in all probability, will the parents be so concerned about the child's health, so open to suggestions as to his protection and incidentally to suggestions about the protection of other young children.

Every nursery school should start its day with a routine examination of each child's nose, throat, eyes, ears and skin. Any child exhibiting symptoms of a fresh cold, inflamed throat, a temperature, a rash or any other sign of an oncoming illness should be excluded from the school before he comes into contact with any of the other children. Such an examination may be left to a trained teacher but is much more efficiently done by a nurse who hopes to keep the school free from colds and other infectious diseases. She must keep her attention on the health of the school and not on such points as keeping up a good record of attendance, pleasing any individual family by admitting a suspected child that day because it happens to be convenient for them, etc. Other duties of a trained nurse in the nursery school will be to attend to minor physical injuries, scratches, nosebleeds and the like which may occur during the school day. Frequently the nurse also keeps weekly records of the height and weight of the children, consults with the parents on the advisability of keeping children out of school some days, and so on. Although in the smaller schools one hour's services may be all that is required from the nurse, the larger schools have no difficulty in keeping a nurse busy for at least half the day.

The nursery school is a better environment for the child and a more serviceable institution if in addition to the nurse it has the services of a pediatrician. The pediatrician usually sees doubtful cases referred to him by the nurse. He usually gives each child a thorough physical examination twice a year, and he should also be on call in case of accident. In the experience of most nursery schools, accidents are very rare, but it is imperative that the teacher know on whom she may call if a child needs prompt medical attention for any reason, such as an unusually hard fall or an uncommon rash developing during the day.

The head teacher. The nurse and the doctor may be essential to the conduct of a good nursery school, but, after all, the person who is responsible for the hygienic conditions under which the child spends his day and who frequently detects the signs of oncoming illness is the trained teacher, the teacher who has been taught the symptoms of the most common children's diseases, the teacher who knows each child well enough to detect any unusual behavior.

The teacher is responsible for all such things as the temperature and humidity of the room, the circulation of the air, and the absence of drafts. She is responsible to a certain degree for the warmth of the clothing of the children. If the children are too lightly or too heavily clad, she should see to it that the mother is informed, and that extra sweaters are available. She is constantly protecting the children from accidents; not by restraining their activity, but by making sure that open windows and hot radiators are guarded, and that sharp scissors and tools are used only under supervision. She teaches the children how to come downstairs safely and where they may climb. The teacher is also responsible for teaching the children that nothing should be put into the mouth except food and particularly

that toys, smuggled bits of food and the like are not passed from mouth to mouth.

In addition to this general protection which the teacher exerts over the children, she must be alert for signs of oncoming illness. Such obvious symptoms as vomiting, diarrhea, extreme constipation with a bloody stool, discharging eyes or ears would scarcely escape the observation of any untrained person but the teacher must see less evident signs. She must recognize the possible significance of sneezing, watery eyes, a new cough, a flushed face in a child who has not been exercising, enuresis in a child who seldom has toilet accidents, lack of appetite in a child who is usually hungry, frequent crying in a child who seldom cries, extreme irritability, indications of pain such as holding on to the head, extreme drowsiness early in the day, unusual susceptibility to fatigue, and a rash, especially about the neck and chest. The teacher should keep herself informed as well as possible about the prevalence of the various diseases in the community in order to be on particular guard in case of even a mild epidemic. She must be ready to take a child's temperature at slight indication and ready to isolate a suspected child and to ask the family to keep him at home on the following day.

The dietitian and the cook. The responsibility for the food that is served in the nursery school rests ordinarily upon a dietitian. If another person is available to do the cooking, the dietitian need not be employed on a full-time basis. She may be the principal, one of the teachers, a graduate student, or a home economics trained person interested in the feeding of young children. She should be versed in the food requirements of the young child and the particular food habits, likes and dislikes of the group in the school. She may be responsible for keeping the food cost down to a certain limit, for records, for interviewing moth-

ers about the home diet and so on. The cook need not be a fancy cook but she should be able to cook simple dishes in approved ways and to the taste of the children. The further duties of this part of the staff will depend on whether or not the school is interested in research work in nutrition.

The assistant teachers. Upon the nursery school teachers falls the brunt of the care and training of the children. Theirs is a fatiguing work and for that reason the young, healthy teacher frequently has the advantage over older teachers. The teacher is almost constantly on her feet, her hours are long, and her days off are extremely infrequent. She must not be subject to frequent colds since this would exclude her from the schoolroom and teachers in the nursery school should be changed as seldom as possible. A group of adult observers in a nursery school were asked what characteristics seemed essential in the nursery school teacher./The combined list from that group included such items as eternal patience and self-control, well modulated voice, strong steady nerves, attractive appearance, good posture, sense of humor, ability to laugh with the children and to laugh after difficult days, love of children, tact, firmness, courtesy, adaptability, fairness, truthfulness, even temper and dozens of others until the prospective teacher may feel that she must be a paragon. Perhaps health. patience and an intelligent understanding of children are the most important points.

The training of nursery school teachers is a topic which has evoked considerable discussion. The head teacher will need more training and experience, of course, than the assistant teachers. The assistant teachers will preferably be young women, recent graduates of a college or normal school where they have had theoretical work on child development and some practice teaching in a nursery school.

The chief duty of an assistant teacher is to understudy the head teacher. She should be able to take full charge of some of the routine duties of a nursery school teacher and should be able to assume responsibility for the whole group in the absence of the head teacher.

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CHAPTER II

THE NURSERY SCHOOL CHILD

It is not particularly difficult for a person who has had some experience with young children to estimate the age of any child with a fair degree of accuracy. Such estimates usually are based upon the height of the child, the ease and coördination with which he moves, the relative proportions of various parts of the body, the number and size of the teeth, the self-control shown, the manner of playing with other children, and the complexity of language forms used. Lack of contact with children for a number of years frequently results in the forgetting of the cues by which the development of a child may be judged. The present chapter is designed to present to students some of the most striking characteristics which the nursery school child shows when he enters the school and some of the characteristics which he shows when he leaves to enter kindergarten. In other words, we shall attempt to describe the average child of two and the average child of five years of age.

Physical development. The average two-year-old child is between 30 and 37 inches tall. The boys in general are slightly taller than the girls. By the age of five, the child may be expected to be from 38 to 45 inches tall. The two-year-old weighs between 21 and 32 pounds, most often about 27, while three years later he weighs from 31 to 45 pounds. In the three-year period he has gained about 8 inches in height and about 14 pounds in weight.

During this period most of the parts of his body have been increasing in size. The brain has gained about 7 ounces in weight; the muscles and the bones have been growing rapidly. The child's posture has been changing. The back, which in the tiny baby is definitely convex, has become gradually flatter until by five years it has the general contour of the adult back.

The pad of fat which makes the footprint seem flatfooted in the baby is still present in the two-year-old but is absorbed during the preschool period so that the footprint of the five-year-old is much like that of an adult. Most two-year-olds are slightly knock-kneed. By the age of five, the legs have straightened. The head circumference is 18 or 19 inches at two years and at five is about 20 inches. The chest circumference is 18 or 20 inches at age two and 21 or 22 at age five. The circumference of the abdomen is about the same as that of the chest up to age two, but after that it becomes decidedly less. The heart gains in weight during these years from 1.87 to 2.40 ounces. The pulse rate decreases from 101.7 to 85.0 in boys and from 103.0 to 90.1 in girls. The blood pressure shows a slight increase. The figures for blood pressure are: age two, boys, systolic 87.6, diastolic 63.6; girls, systolic 94.0, diastolic 66.0; age five, boys, systolic 91.5, diastolic 66.2; girls, systolic 94.3, diastolic 65.2. The rate of respiration decreases from 25 per minute in two-year-olds to 22 per minute in six-yearolds. The two-year-old child has ordinarily 16 teeth free from cavities and from stain. The five-year-old child has had all 20 milk teeth for several years and during that time has, more often than not, acquired a cavity or two and has needed to have his teeth cleaned by a dentist. The sitting height (measured from the seat of the chair to the top of the child's head) is relatively great when compared with the standing height in all children, but the

discrepancy is greater the younger the child. In other words, the legs of small children are short in proportion to their total height. The five-year-old has a better appetite than the two-year-old child. Cases of "non-hunger"



FIG. 1.—FOOTPRINTS OF CHILDREN AGED TWO AND FOUR SHOWING DEVELOPMENT OF THE ARCH IN THE OLDER CHILD.

are much rarer at the older age. The five-year-old sleeps about an hour and a quarter less during the twenty-four hours than the two-year-old and this difference is due almost wholly to the discontinuance of the day nap. There seems to be some evidence for the statement that the five-

year-old is less susceptible to nose and throat infections than are the younger children.

Motor development. The two-year-old has acquired sufficient control over the muscles of his hand to enable him to draw a vertical stroke in imitation of one which he has seen drawn. The five-year-old, on the other hand, can copy a triangle or a square. The two-year-old has no difficulty in walking and running, but he is as yet unable to perform all the complicated skips and hops in which the five-year-old delights. The two-year-old can go upstairs by himself but he places both feet on each step and holds on to the railing firmly. The five-year-old can climb stairs in the adult manner. The two-year-old can operate a kiddy car around ordinary obstacles. He can play a simple game of catch and toss with a ball. The five-year-old can bounce a ball. The two-vear-old can manage a cup by the handle and can use a spoon, though not usually a fork or knife. The two-year-old can put on his shoes and sometimes a few other articles of dress, but by the time he is five he can dress himself completely, can button his own clothes and sometimes fasten a bowknot and hooks and eyes. The two-year-old can be expected to replace blocks in a basket; the five-year-old can be expected to pile them neatly in a box or on a shelf. The two-year-old can fit round pegs into round holes, but he has difficulty with other shapes. He can build a simple tower of blocks, but not a graded tower like the Montessori pink tower. The fiveyear-old builds complicated block walls, stairs, garages, etc. By the age of five the child can bring the thumb and finger tips of one hand into contact.

Mental development. The two-year-old child has ordinarily acquired a small but useful vocabulary. He employs chiefly nouns and verbs and he frequently confines himself to sentences containing not more than two words.

Pronouns are used very infrequently and then they are often confused. He may say "Her go" and "Me want she." The five-year-old may have a vocabulary from two thousand to four thousand words. The questions of the two-year-old are limited to queries beginning with "what" and they usually concern the names of things. The questions of the five-year-old cover a much wider range of topics and frequently include questions beginning with "why" and "how." The two-year-old can name a few familiar objects; the five-year-old defines words in terms of use. The articulation of the two-year-old is commonly that known as baby-talk; the articulation of the five-year-old is almost perfect. The idea of number, except in a rudimentary form, is seldom present before the age of four.

The two-year-old child will imitate the voice and facial expression of an adult. The five-year-old child goes far beyond this and is frequently very dramatic in his imitations. He is constantly pretending to be first one person and then another. Sometimes for days he is a dog or he is some member of the family (usually the mother) or he is some person much discussed at the moment (such as Lindbergh). The two-year-old is not particularly interested in stories. His attention may be held a few moments while an attractive picture is explained, but most of his attention will be directed to the picture rather than to the discussion. Most five-year-olds are much interested in many types of stories. A picture containing many details is bevond the grasp of the two-year-old. As a rule things out of the two-year-old's sight are forgotten. For this reason he weeps when his mother leaves him, but his tears are dried within a few moments. He is very glad to see her when she returns, but he seldom really misses her. The five-year-old, on the other hand, has very clear memories of his past and may suddenly burst out with some reminiscence which has not been mentioned for a year or more. Even the five-year-old's knowledge of time is very inaccurate. He confuses the day before yesterday with last month, and so on. Most five-year-old children begin to delight in simple riddles such as "What in the house runs, but never goes out the door?" At five the child is not so suggestible as he has been before. He has begun to form ideas of his own and to depend more upon them.

The two-year-old is exceedingly limited in his information, while the five-year-old knows a great deal about the world around him. The following questions are some which were satisfactorily answered by more than half of a large group of kindergarten children but by none of a group of two-year-old children: What day of the week comes after Saturday? Who was the first president? Where are the clouds? What makes it light in the daytime? What colors are the keys on the piano? What does a cat scratch with? What do bees make that we eat? From what are little chickens hatched? What do apples grow on? What does a plumber do? Where does wood come from? What do we call a man who raises corn or wheat? What do you use to put a nail into wood? What do people fish with? What are skiis made of?

Emotional development. Generally speaking, the emotions of the two-year-old have less variety and are briefer in duration than those of the five-year-old. The five-year-old is more self-controlled and more reserved. At two the child is often very affectionate and ready to attach himself to any person who smiles once or twice. Three years later he is usually more deeply attached to a few people but he is less ready to assume that every adult who looks pleasant is worthy of his adoration. After affection the emotion most frequently seen in the two-year-old nursery school child is anger. This anger is aroused most easily

by the frustration of the child's movements or of his plans. It is most frequently shown toward other children. Perhaps the most striking characteristic of the small child's anger is its brevity. The two-year-old is exceedingly volatile. A third emotion which frequently makes itself evident in the two-year-old child is fear. Fear of dogs, fear of strangers, etc., are fairly common among two-year-olds but have lessened considerably by the time the child has become five. The five-year-olds show some disposition to discuss objects and persons to be feared apparently in the hope of impressing some younger child with the narrator's bravery. In general the emotional life of the two-year-old is lacking in variety, is intermittent, easily aroused and very easily dissipated. The emotional life of the five-yearold is much richer. Jealousy of a younger brother or sister has frequently made its appearance by this age. The child of five seems to be able to interpret the feelings of others in a way that has been impossible before. He recognizes expressions signifying laughter, pain, anger, fear and surprise. Scorn is still largely beyond his ken. The conduct of the five-year-old is in good part controlled by anticipation of the results, whether reward, ridicule, or punishment. Such imagination is beyond the ability of most two-yearolds. The child of five with reasonably good training tries to be pleasant, polite and brave. Such feelings as remorse, gratitude, shame, reverence and revenge are still to come with the later years.

Social development. One of the most striking differences between the two and the five-year-old is in their attitude toward other children. The two-year-old is, to be sure, interested in other children but his play is in the main solitary. It is not at all uncommon to see two children of this age playing with similar material in the same room, each intent on his own play and disregarding the other.

The two-vear-old seldom gets the idea of competition and probably never gets to the point of trying to beat his own record. The five-year-old for a short period will take keen joy in trying to surpass some other child in some simple performance, but the satisfaction of winning is soon forgotten and any little thing may interrupt the race just when competition is apparently most keen. Even the fivevear-old will ordinarily fail to work with a group in any kind of true team play. At this age he is interested in ring games with some dramatic imaginative content (such as "Farmer in the Dell"). The child of five is much more assertive with his playmates than is the younger child. The five-year-old is sometimes a leader, frequently a follower. The two-year-old is occasionally a follower, practically never a leader, almost always a child whose activity parallels but otherwise neglects the activity of his mates.

The sense of humor is much more developed at five than at two years of age. The younger child smiles when you smile at him, laughs when you laugh, and occasionally laughs when by himself. Perhaps his experience is so limited that he does not see the inconsistencies and incongruities which are so amusing to the older child.

Development in play. There is considerable evidence that the play of the younger children is determined in great part by their interest in the various sensory experiences. The two-year-old still tends to put everything in his mouth. This is not from any misconceived notion that the various articles are food or candy. He actually enjoys tasting different substances and manipulating objects with his tongue. In a similar way the younger children spend a great proportion of their time in the mere handling of objects. In their play with sand they spend many minutes in squeezing handfuls of sand, in letting it run through their fingers and so on. The two-year-old seems interested

in sounds as sounds and is not so much interested in their import as is the five-year-old. A shrill piping will receive the comment "whistle" from a two-year-old while the five-year-old will exclaim in great excitement "pop-corn wagon."

In a later chapter we shall discuss the use of various play materials by children of different ages, but it seems worth while here to summarize briefly some of the chief play interests of the older and the younger children of the nursery school. The two-year-old tries to hop and dance and swing, he climbs over and around obstacles, jumps off steps, he drags and pulls toys on wheels, he rides kiddy cars, plays with sand, balls, blocks, dolls, boxes, pegs, plays with sounds and all sorts of noises. He has no games, but merely formless plays which are individualistic, self-centered, even selfish, and which endure only a minute or two. His chief interest is sensory and motor experimentation.

The five-year-old enjoys many of the materials which the two-year-old enjoys, but the older child uses them in a much more advanced way. His blocks form garages, hangars, stores, etc. His sand is made into hills, tunnels, roads, farms. His movement plays are much more complicated; skipping and jumping rope to the accompaniment of a mystic rime, hopping on one foot, or walking along a crack in the sidewalk. His kiddy cars are automobiles or trolley cars taking him on important business while the rest of the family await his return. His doll play is a group play of considerable complexity in which the doll is but one member of the family. His crayon and clay work are for the sake of a product, not merely for the fun of handling the material. His conversation is for the sake of communicating ideas, not for the mere fun of saying words. He is beginning to differentiate between girls' play and boys' play. He wants to move far and to move quickly. His curiosity and questions are almost without end. He plays with language, makes jokes, delights in a chance foreign phrase, acquires slang daily, enjoys ladders, teeter-totters, merry-go-rounds, parallel bars, velocipedes, works with scissors, pencils, paste, sewing, may start a collection of utterly useless articles. The group has by this time become of great importance to the child.

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CHAPTER III

THE EQUIPMENT OF NURSERY SCHOOLS

BUILDING AND GROUNDS

THE space required for a good nursery school will depend on the number of children to be accommodated and in part on whether or not the school is in session for the entire day. The most desirable division of space between outdoor playground and indoor playroom will vary with the climate. If the weather is warm enough for the children to play out-of-doors the greater part of every day, less indoor space is necessary than if the children are frequently kept inside by storms or excessive cold.

The playground. A fairly large playground is desirable. Gray and Staples suggest 500 square yards as the minimum for a group of twenty or twenty-five children. The children must have plenty of room to run and to play at lively games without interfering with each other. On the other hand, the playground must not be so large that it cannot be well supervised by the available staff of teachers. Such accidents as occur in a nursery school usually happen on the playground and the teachers on duty may need to get quickly from one piece of apparatus to another.

The ideal playground provides a sunny exposure well sheltered from the cold winds of winter and a shaded expanse protected from the heat of the summer sun. The playground must be well drained and dry. Trees are an addition since they furnish shade in the summer months

and add to the attractiveness of the playground. Shrubbery is only a nuisance. It is likely to prevent clear visibility of some part of the yard and is almost certain to act as a catchall for balls, waste paper and all kinds of refuse. The surface of the ground should be covered in most places with grass. The grass will get worn off in spots within the course of a few years but better resod the playground occasionally than expect the children to keep off the grass or to play in a dirt yard. Covering the ground near the door of the building with gravel or paving will save much soiling of inside floors. There is a considerable advantage in paving at least a pathway through the yard. This provides a level stretch for the use of kiddy cars and velocipedes at all times and during a spring muddy spell it may be the only really usable part of the yard.

The playground should, if possible, make provision for rainy weather and for periods when mud persists day after day. In mild climates and in summer in all climates it is possible to use the shelter type of building in which the side toward the southeast is open to the air. A tent with a flooring and adjustable sides makes a good rainy day shelter. Even if the school is denied the advantages of a rain shelter, it may still have cement walks, well drained sand boxes with adjustable waterproof covers and gravelled areas which dry quickly after the rain is over.

The garden. From some points of view a garden is a desirable addition to the playground. If the garden is for the sake of appearance only, and in any way hampers the outdoor play of the majority of the children, it should be omitted from the plans. A garden which is merely an area to be avoided is a waste of space. So also is a garden which blooms only during the vacation when there are no children to realize the results of their spring planting. A garden presents many problems but under the guidance

of a wise and interested teacher it may be of considerable value to the older children. To get the greatest good from the garden the children should help in preparing the ground, in sowing the seeds, and in watering the growing plants. Quick growing plants with showy blossoms are best for nursery school work and even then the children may have forgotten the planting by the time the flowers bloom. The question as to whether or not the children shall be allowed to pick the flowers when they bloom must be settled by each school. If this activity is allowed, the children should be taught to break the blossoms off without injuring the plant.

Provision for active play. Other additions to the outdoor playground which provide much desirable play activity are found in the "digging corner" and the "jumping pit." The digging corner is merely a small section of the playground in which the children are allowed to dig as much as they like. If small-sized spades are provided the children will have great fun in actually digging up the dirt, perhaps even carting some away. Some schools provide a "pit" hollowed slightly into the ground and filled with sawdust into which the children may safely jump. The sawdust is soft enough to prevent bad bumps and is clean enough to be brushed off after the fall. The possibility of a wading pool and other outdoor apparatus will be discussed in a later section.

Wild animals. Further additions to the outdoor playground may be made in the form of live animals. In many communities squirrels are not infrequent visitors to the nursery school trees and are of great interest to the children. Birds may be attracted to the playground by erecting birdhouses, by hanging balls of suet, and by scattering crumbs in winter, or strings and nesting material in the spring. In trying to entice birds to the yard, the attempts should be made first in a corner little frequented by the children. Gradually the bait of food or nest material may be moved closer and closer to the building without frightening the birds. The possibility of other animals in the playground will be considered in the section on play materials.

The fence. After the playground is laid out, comes the question of how to mark the limits of the area. Most schools find the most practical device to be a strong fence of such a design as to discourage climbing. With a fence and a gate which the children are unable to open, the teacher is free to devote her energies to the direction of play activities. Other schools refuse to have their playground fenced on the theory that at home the children have no fence and they should be required at school, also, to stay within certain limits not emphasized by a physical barrier. Although it is possible to train the children to keep within this space, the practical result usually is that the teachers and assistants are kept so busy counting the children, to make sure that none has strayed away, that they have little time left for guiding the play activities.

The roof. City schools will have ordinarily to rely on a roof playground. In such play space, trees and grass will of course be out of the question and a garden will be rather difficult to arrange, but the roof playground has some advantages in that it is never muddy, dries quickly after a rain storm and can usually be arranged to provide a maximum of sunshine with a minimum of wind. This type of playground requires secure fencing, high and strong enough to prevent any possibility that a child may fall himself or drop objects to the ground below. An added precaution in some schools is a heavy wire netting stretched over the top of the play space and fastened to the fencing. This cagelike protection in no way interferes with the

activity of the children, but leaves them free to climb as much as they like.

The building. In most institutions the building used for the nursery school is a remodeled dwelling or part of another school building. Few nursery schools are so fortunate as to have a building specially designed. There are arguments for and against all the different types of buildings. Some teachers think a remodeled dwelling provides a more homelike atmosphere than other nursery school buildings. Some prefer a building in which all the rooms are on the ground floor; others think that if most of the children are accustomed to sleeping "upstairs" at home, better results will be obtained at nap time if the nursery school has a second story. Whatever the style of building, it is a great advantage to have a building which is used for the nursery school, and by no other group of people.

The play room. In any nursery school structure certain elements are essential. There must, in the first place, be plenty of play space. Gray and Staples suggest 1,200 or 1,300 square feet for twenty to twenty-five children. This space should be divided into several rooms which may be shut off from each other. These play rooms should receive plenty of sun, adequate heating and ventilation and windows low enough to let the child look out. If the windows are too high for the children to reach, a platform or balcony reached by steps may be constructed. There should be ready access to the playground and to the toilets as well

The locker room. Every nursery school needs plenty of space for lockers and toilet rooms. Each child should have a locker of his own and there should be space enough to allow a number of children to put on their outside wraps at the same time. This means about nine square feet per child. One toilet for every ten or twelve children and one

lavatory for every eight or nine children is the minimum requirement for the easy dispatch of the toilet routine. In the toilet room there should be provision for hooks for individual wash cloths, etc., with at least ten inches between the hooks of different children.

The sleeping room. In addition to play rooms and toilet rooms the well-equipped nursery school needs a sleeping room. Preferably this should be a room which is used for no other purpose. Thirty to forty square feet per child will prove to be as small space as is feasible. This space is most useful when divided among several rooms, each of which should have ample ventilation and provision for storage of the individual bedding when it is not in use. If one large room has to be used, movable screens erected between the cots will lessen the distraction caused by the number in the room. The sleeping room should have ready access to a toilet room. It should be situated in the quietest part of the building, and have a north and east exposure if possible. As a substitute for the separate sleeping room the school may use folding cots which hook back against the wall of a room usually used for play.

The nurse's room. Near the entrance of the building there should be a nurse's room where each child may be examined before he joins the group. A great convenience is an isolation room near the nurse's room, where a child who cannot be sent home immediately may be kept away from the other children. If the room is not being occupied by an ill child it may be used as a place of isolation for a child whose behavior is such that exclusion from the group seems desirable.

The dining room. Ideally a nursery school may have a dining room but this is a luxury to which few even aspire. Such a room, with no play material in evidence, might easily help the establishment of good eating habits. The common substitute for the separate dining room is the play room with toys put away and the play tables transformed into dining tables, with probably additional collapsible tables set up for the mealtime only.

The kitchen. The kitchen should be near enough the dining room to facilitate easy service. It may be on the floor below with dumb-waiter connection or may be the adjoining room on the same floor. The kitchen should, of course, have a separate service entrance and should be equipped to cook large quantities of food in ways suitable for young children.

FURNISHINGS

In furnishing the nursery school certain features are almost essential. Since small children spend a large part of their time on the floor, that floor must be reasonably clean, warm and free from drafts. A heavy linoleum cemented down meets these requirements and has the added advantages of being relatively quiet and unharmed by daily scrubbings. The walls should be smooth, washable and preferably painted in a flat paint of soft color; the ceilings should be white or cream color to reflect the light. The windows should be furnished with adjustable shades for use when darkened rooms are desired for naps and occasionally at other times to protect the children's eyes from glaring sunlight. Draperies have the advantage of adding to the homelike atmosphere and to the cheerfulness of the room, though they have the disadvantages of keeping out the light and gathering and holding dust. A slate blackboard securely fastened against the wall about two feet from the floor will be an addition to the play room. A burlap-covered board or something else to which pictures may be attached temporarily has many uses. The school which provides no place where thumb tacks may be

inserted is handicapped. All woodwork should be smooth with no grooves to catch the dust and no sharp corners to hurt active children.

The tables provided should be sturdy and stable, with tops which may be readily and thoroughly cleaned. Some schools find that tables designed for cafeteria use with linoleum tops and legs cut down stand up remarkably well under hard wear. Such a table top has the added advantage of being quieter than a wooden top. If it is necessary to have tables which may be folded up and stored away, they must be ones which are stable when erected and secured by some fastening which does not readily pinch investigating fingers. Nursery school tables are usually made 16 to 18 inches high.

The chairs for the nursery school should be low enough, 9 to 12 inches, to allow the child's feet to rest on the floor. The seat should be somewhat saddled and the chair should provide some support for the back. The chairs should be fairly stable but light enough for the child to carry around.

The nursery school needs considerable cupboard and shelf space: both open shelves to which the child has access and from which he can select a variety of play material, and storage cupboards or closets for material which is not always available such as clay, sleds, and watering cans. Additional storage space is needed for extra supplies of paper, clean bedding and the like. The cabinet for medical supplies must be wholly inaccessible to marauding children.

Certain provision should be made for the protection of the children. If the nursery school occupies any other than the ground floor of the building, a fire escape should be provided, and the children should be given practice in its use. There is no need, in fact there are arguments

against regular "fire drills" with young children, but it is important to have the children so used to the fire escapes that there will be no reluctance to leave by that route if necessity arises. A fire extinguisher should be available and the teachers should know how to use it. Desirable room temperature may be maintained if thermometers are hung at the level of the children's heads. If the air is very dry, humidifiers may afford some relief. In the northern states, direct winter drafts from windows may be avoided by some sort of guard or screen. On high buildings, the windows must be railed or guarded to prevent any child falling out and in warm weather all windows should be screened. Radiators, if used, should be surrounded by a guard. It is easy to teach an individual child and not difficult to teach a group to keep away from hot radiators. It seems wiser, however, to use guards than to hamper the active play of a large group or to run the risk of bad bumps and burns during some bit of race or strenuous romp. Another protection which is distinctly worth while is a gate at the head of stairs, particularly if the children are likely to be playing near by. Such a gate may also serve as a reminder of the limits of the play space. The children can and frequently do open the gate for visitors coming up the stairs, but as long as the gate is closed they seldom wander through to other parts of the building.

The nursery school equipment should include also some appliances for keeping the rooms clean. Handy brooms and dustpans for spilled sand, floor cloths for spilled food, cloths for wiping the luncheon tables and dust cloths are a great help to the neatness of the room.

The equipment for the sleeping room will include, of course, beds. These beds may be very simple but they should be strong. Some schools prefer the regular crib

with springs and mattress on the theory that the children will sleep better if given the type of bed to which they are accustomed at home. Most schools, however, are satisfied with the naps taken on canvas cots with no mattresses. The cots should be 48 to 54 inches long and about 10 to 12 inches from the floor. These cots are very easily cleaned with soapsuds, a scrubbing brush and sunshine, and the children do not complain of their hardness. If the sleeping room is used for naps only, stationary beds are preferable; if the room has to be used for other activities at other times of day, there may be substituted a folding canvas cot which is set up in a moment. A mattress and a small pillow may be added, but they are not at all necessary. The bedding provided will vary with season and climate. If the children sleep out of doors or in very cold rooms, a simple sleeping bag will solve all question of whether or not the child is warmly tucked in. Blankets may be wool, part wool, or cotton. Sheets may or may not be provided, depending usually on whether or not the children are completely undressed for the nap. If they nap in their clothing, the sheets will become soiled very quickly and create a serious laundry problem. Some schools provide a mattress pad for the child to lie on. This does not soil or crumple as readily as a sheet and it provides a fairly stiff surface under which the other covers may be tucked if no mattress is used. Rubber sheets should be placed under the sheet or mattress pad of the children who are apt to wet the bed during nap time. Each school will settle on its own way of arranging the bed covers. One arrangement for winter is to lay first a part wool blanket and then a cotton blanket on the cot with one edge of the blankets at the edge of the cot; then lay a mattress pad on top of the blankets and fold the blankets over so that the child can get inside readily and be tucked in easily. The cotton blanket is by this plan brought next to the child's body and so serves as a sheet.

The furnishings for the dining room would include the tables and chairs already mentioned under the general furnishings. The tables may be bare or covered. Tablecloths are dainty and attractive and may add to the child's desire to keep from spilling, although they increase the laundry bill to a considerable extent. These cloths, whether white or colored, should be of durable, easily laundered material. Substitutes for tablecloths may be found in doilies of either cloth or oilcloth. The cloth doilies are much less desirable than the tablecloth, are more trouble to make, and are almost as expensive to launder. The oilcloth doilies are feasible but are not particularly attractive unless stenciled and even then the colors wear off in a comparatively short time and give the doilie a dingy appearance. Care has to be taken that such doilies are thoroughly cleaned and dry when put away. The children may be furnished with bibs or napkins. Large, fairly heavy paper napkins are usually satisfactory for the older children. though the two-year-olds will ordinarily require bibs. The bibs may be tied on or designed so that they may be adjusted by the child.

In some schools, where the children wait on the table, trays are used in carrying dishes back and forth. Such trays should be small in size and light enough to be easily handled. The pattern of the dishes used may not only add to the attractiveness of the table but if part of the design is in the bottom of the dish they may be an inducement toward cleaning the plate. A deep plate or sauce dish is easier for the child than a flat one in which the food may be pushed off the edge. Some schools prefer cups for milk; others find small glasses easier for

the child to hold. Some schools prefer an ordinary teaspoon, others select a baby spoon with a short, straight handle.

The fixtures in the toilet room may be child-size or adult-size, according to whether the school prefers to stress the convenience of the child or the training for the home situation. Whatever the size, the toilet should be readily accessible to the child, about eleven and a half inches from the floor, even if this necessitates a step or platform for the child to stand upon. If a child-size toilet is selected. it is well to avoid those which are extremely small and choose instead one whose seat measures about 16 by about 13.5 inches. The toilet should be one which is easily flushed by the child. The lavatories may be simply small sized washbowls set low enough to be convenient for the child or arranged with a stable platform or box in front for the child to stand upon. A drinking-fountain may be arranged in connection with the faucets. Some schools which prefer to know exactly what amount of water the child drinks give each child a stated amount of water to drink at regular times during the day. Some schools are provided with a bathtub, others with a sink some 20 inches square which allows for a shower bath.

Toilet-room equipment may be expected to include also a mirror, soap, individual face cloths, combs, and tooth-brushes. Some schools provide individual linen towels; others prefer paper towels. If paper towels are used they should be very soft and absorbent since it is difficult for the small child to dry his hands thoroughly under even the best of conditions. A few bath towels will be required for special emergency baths and some arrangement should be made for extra handkerchiefs. Paper handkerchiefs of good quality are usually satisfactory. A school with many young children not yet trained in bladder con-

trol and a school located where rainy and muddy weather is common will get considerable service from a clothes drier.

The amount of medical supplies needed by a school will depend chiefly on the service which the school expects to give. Any school should be equipped for minor accidents, and should have on hand such items as: a clinical thermometer, mercurochrome or iodine for scratches, alcohol, carron oil or something of the variety for burns, zinc ointment, calamine lotion, ephedrine, sterile gauze, bandages, cotton, tongue depressors, and applicators. The school should also have scales which give correct weight to about sixty pounds.

PLAY MATERIALS

No one list of play materials can be made which will suit every nursery school. A school located in the north must provide for many days of indoor occupation during the winter. A school with considerable indoor play space and a relatively small outdoor playground will require different material from one where the amounts of space are reversed. A school which must run on a very limited budget will necessarily omit many pieces of equipment which the better endowed school will consider essential. The aims of the school will affect the variety and to some extent the type of equipment. The half-day school run chiefly for experimental purposes will not need the materials demanded by a full-day school or a school which tries to serve as a community demonstration center. Moreover, the equipment of any school will reflect to some extent the individual interests of the teaching staff. If the head teacher is particularly interested in work with tools, for example, that school will almost certainly be better equipped with tools than the school whose ordering is done by a person

particularly interested in painting or in the development of activities involving the large muscles.

The account of materials given here is not meant to be exhaustive. Neither is it meant to present a minimum requirement of a nursery school. The aim has been rather to suggest some of the many kinds of occupational material which have been tested and approved by some recognized nursery school.

General requirements of play materials. It may perhaps seem manifest that no equipment should be supplied which is in any way dangerous or harmful. This means that in adopting a new piece of gymnasium apparatus, the approval of a pediatrician should be secured. We have, for example, excluded roller skates from our list of desirable apparatus because of the belief of physicians that the pull of the heavy skate tends to result in an enlargement of the ankle bones. For a group of small children. toys or utensils made of glass should be excluded. Sooner or later the glass object is certain to be broken and cuts and scratches usually result. Moreover, if the glass object breaks in the sand box, as it frequently does, all the sand must be discarded to prevent further mishaps from hidden bits of glass. The desirability of any pieces of equipment with sharp points or edges, such as pointed scissors, saws or hammers, is open to question. If used at all, such tools must be kept under strict supervision. The experience of the young nursery school child is so limited that he cannot be allowed to experiment indiscriminately.

The second requirement of all nursery school furnishings is that they can be thoroughly cleaned. This limitation need not be so strictly enforced in a school where there is satisfactory daily medical inspection, or where the children come from clean homes and responsible families, but it is one of the most important points in the equipment

of a nursery school in a large day nursery. Generally speaking, then, toys should be made of wood, rubber, metal, or cloth which can be washed. Woolly animals, dolls with real hair, and other toys of that nature should be used only in a group of clean children.

Play material for the nursery school should be selected with reference to durability. If small children are to be taught to take care of their toys, they must be provided with toys which are worth their trouble. Not even the most . careful child can get real joy or benefit from many of the flimsy articles which are bought because they cost only a few cents. After these cheap impractical toys have been used a few days, a wheel comes off, or an eye falls out and the toy cannot be mended satisfactorily. Such things happen at home. They happen with far greater frequency when children are brought together in a large group. Each toy is used more often and is likely to receive rougher usage in a group than when used by a child alone. We want, then, materials that will last under reasonably hard wear. An important question in the selection of any particular piece of apparatus is whether or not it will be of lasting interest to the children. The perfect piece of apparatus is the one which appeals to many different children of a fairly wide range of ages, and the one which can be used in many different kinds of activity. Such a one is a set of blocks of wisely selected sizes. A poor toy from this point of view is one which can be wound up to produce one particular motion but cannot be used for any other purpose. The adult may be interested, perhaps, in the clever way in which the inventor has reproduced the semblance of some action, but the child is not concerned with the mechanics of the device and after a comparatively short time he fails to derive pleasure from watching the tin man dance on top of the box.

Whenever possible the play materials should reproduce the conditions of actual life. Toy animals, for example, are more desirable when made in approximately the correct proportions and right colors than they are when the rooster towers over the elephant and the horse is painted green with pink spots. There is, of course, a limit beyond which such reproduction is of little advantage. From the point of view of encouraging the development of the imagination, a stick of wood may be more satisfactory than the ordinary doll to be found in the stores. The simple toy which leaves many details to be supplied by the imagination may be very good; the toy with elaborate but incorrect details neither stimulates the imagination nor aids the child in the acquisition of facts.

A piece of play material may be chosen for some particular purpose. A toy telephone, for example, may induce a lazy two-year-old to attempt talking. A ball may stimulate group play; a picture book may result in group conversations.

A further characteristic which is desirable is that the play equipment be artistically designed. Our notions of art are learned through experience and there is no reason why a child's toys should not be colored and shaped so as to conform to a reasonably high artistic standard.

Apparatus for very active play. Most children of preschool age are exceedingly active. Any well-equipped nursery school will provide an opportunity for them to run and hop and leap and climb. A piece of apparatus well adapted to satisfy the child's desire to climb is the Jungle Gym Jr. which may be obtained in wood or metal and may be set up indoors or on the playground. It consists of a small forest of horizontal bars which offer opportunity for all sorts of climbing. A simpler piece of climbing apparatus is a climbing house or climbing fence, a sort of

summerhouse with straight walls and a flat top which allows the child to climb up either side of the walls and across the top, but in which there are no bars inside the enclosure. Such a structure (Fig. 2) lends itself to all sorts of house play and animal play. Simpler apparatus for climbing may be provided by discarded packing boxes, an ordinary ladder, a stepladder, or a climbing horse made by covering a low tent-shaped frame with slats. A short flight of steps ending in a small platform gives excellent practice for children not used to stairs.

Swings provide almost endless joy. A broad board swung so that all four corners are supported and hung very near the ground can be used by children less than two years old. In the ordinary type of swing, it is perhaps needless to say, the ropes must be replaced frequently and the seat must be permanently attached to the ropes to prevent any chance of accident resulting from the slipping of the seat. Variations of the swings are found in flying rings from which the child swings by his arms, the trapeze, which is too difficult for any but the most agile four-year-olds, the single strand of the giant stride which offers opportunity for a combination of climbing and swinging, the rope ladder and the single rope with a big knot at the end for a seat or with knots scattered up the rope to help in climbing.

A slide provides excellent exercise. The slide ordinarily ends a few inches above the ground but fewer bruises develop if the slide delivers the child directly onto a waxed board laid on the ground. Simple slides consisting essentially of two waxed boards, one attached to the edge of a table or chair and the other adjoining the ground or floor, may be obtained inexpensively or made at home.

Seesaws or teeter-totters may be obtained in all degrees of refinement. A loose board pivoted on a stationary sup-

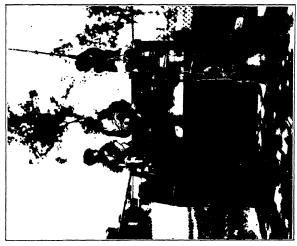




FIG. 2,--CHILDREN NEED A CHANCE TO CLIMB, FIG. 3,-

FIG. 3.—A SINGLE STRAND OF A GIANT STRIDE OFFERS POSSIBILITIES FOR MUCH ACTIVE PLAY.

port without a guard offers too many opportunities for badly pinched fingers. A cheap satisfactory teeter-totter, however, may be made by nailing a smooth board to the side of a small keg. Here the rolling of the keg provides the motion. Teeters with rockers attached may be obtained from any school supply house, which can usually supply also variations in the form of rocking-seats or rocking-boats. The latter provide more chance for social play since they usually accommodate two children on each seat. A further advantage is that they are heavy enough to allow one child alone to rock by himself. A disadvantage is that some of them can be rocked very high by daring children.

Bars of various kinds afford good exercise for large muscles. Turning bars may be placed in doorways or combined with a climbing fence. A simple piece of low iron fence installed on the playground will provide a chance for turning and balancing. A few very active children may be able to use a chinning bar. Parallel bars set low enough to allow the child to "walk" on his hands with his legs swinging free are a possibility while a walking-board wide enough to support one foot gives practice in maintaining equilibrium.

Apparatus for use in very active play is usually popular. The hobby horse provides opportunity for dramatic, social, and animal play. Of the various vehicles, the simplest is the kiddy car. These should be without pedals for the smallest children. Velocipedes provide a fascinating way of learning balance, coördination of muscles of legs and arms and so on, but they need more space than the average nursery school can supply. The same can be said for "scooters." Both of these vehicles move too rapidly to be practical for indoor exercise and both need a fairly long straight runway for outdoor use. For winter play in snow small sleds are an inducement to activity. A very

gentle slope which allows a slow motion of the sled and is not an arduous climb back, is very satisfactory for two-year-olds. If the playground lacks a steeper slope for the use of the older children, a miniature hill may be made by piling the snow over an old packing box.

For somewhat less active play there are wagons of various sizes, wheelbarrows, and two-wheeled carts. These toys are frequently used in plays of housekeeping or travel. Closely allied are the plays with trains and automobiles. The nursery school child is perfectly content with a wheelless train, such as the Blok-that-Lox and the train made by the Take-Apart-Toy Laboratory. Both trains are made of wood, without wheels and in both an indefinite number of cars may be joined together.

A piece of apparatus which is particularly popular with the three- and four-year-old boys is the large, rubber-tired cast-steel truck. There are several good makes which will endure for years. The type with the widest applicability is the dump truck with no covering over the driver's seat. This design allows the child to kneel in the truck and steer the car easily. Some of these steel trucks come also in a smaller size suitable for use in a sand box. Their price may seem excessive but when their durability is compared with that of the usual cast iron truck, the steel car proves its worth.

Blocks. There are few children who at one time or another do not enjoy blocks. The more complicated sets of blocks which permit the child to make elaborate buildings and pieces of furniture are beyond the need of the nursery school child but certain simpler sets are of the greatest value. A modification of the Montessori pink tower has proved fascinating and of educational value to the two-year-olds. This consists of a set of cubes, ranging in size from hollow cubes whose sides measure 7 inches to solid cubes measuring 2 inches. These sets may be painted

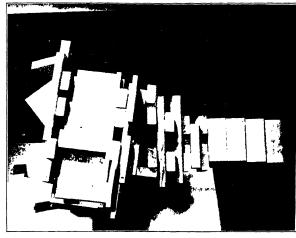




FIG. 4,--"HOUSES" BUILT FROM THE SAME SET OF BLOCKS BY A BOY OF TWO AND A BOY OF FOUR,

in bright colors. Another set of blocks which are in almost constant use in nursery schools are smooth, wooden bricks about the size of paving blocks. Whatever sizes are preferred, the blocks should be multiples of each other so that the area of two small blocks equals that of a large block and so that paths and walls with even tops may be built. A few extra irregular pieces, curved, triangular, cylindrical and the like will add interest to the building. A few boards a foot or two in length will increase the utility of the set by providing roofing material, etc.

A set of blocks which has been suggested by the Bureau of Educational Experiments for ten four-year-old children is cut on the following measurements in inches:

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100 half units 1\% \times 2\% \times 2\%
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- 200 units $1\% \times 2\% \times 5\%$
- 100 double units $1\frac{3}{8} \times 2\frac{3}{4} \times 11$
- 24 quadruple units $1\% \times 2\% \times 22$
- 15 diagonals (half units cut diagonally in half)
- 15 diagonals (units cut diagonally in half)
- 20 pillars (units cut lengthwise in half) $1\frac{3}{8} \times 1\frac{3}{8} \times 5\frac{1}{2}$
- 20 cylinders, diameter 23/4, length 51/2
- 20 cylinders, diameter 13%, length 51/2
- 20 curves, length 10 in. (cut from 13% material, quarter sections of a circular ring having an outside diameter of 14 in. and an inside diameter of 8½)
- 20 switches, length 13 in. (cut from 1% material, quarter sections of an elliptical ring having outside diameters of 22 in. and 15½ in., with inside diameters of 16½ in. and 10 in.)

A simpler set of blocks of good sizes for nursery school use is cut on the following measurements in inches:

- 20 bricks $3 \times 6 \times 12$
- 100 bricks $2 \times 4 \times 8$
 - 50 bricks $2 \times 4 \times 16$
 - 50 bricks $4 \times 4 \times 4$

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30 bricks 4 \times 4 \times 8
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20 triangles 2 inches in thickness, with sides measuring $8 \times 8 \times 11$

20 boards $1 \times 4 \times 24$

20 boards $1 \times 8 \times 24$

2 planks $1 \times 10 \times 6$ ft.

2 planks $1 \times 8 \times 6$ ft.

2 planks $1 \times 16 \times 4$ ft.

In addition to these small blocks, a set of hollow "yard blocks" with a few planks will make a building large enough for the children actually to get into and serve as an impetus to all sorts of group social play. A convenient type of yard block is made of ¾-inch stock, some blocks to measure $6\times12\times24$ inches and others $6\times12\times12$. The blocks should be painted to protect from the weather and should have fairly large holes or slots in the ends to prevent warping in damp weather and to serve as a means for carrying the block. These blocks may be used either outdoors or indoors.

Any blocks for use in nursery schools should be made from wood which is free from splinters and which is reasonably light in weight. Some schools recommend very highly corkwood obtained from the balsa tree. Blocks which are shellacked or painted do not soil as readily as do those from untreated wood.

Dolls and materials for doll play. Dolls get such very rough usage in a nursery school that many of the ordinary dolls in the stores are utterly impractical. Two kinds of dolls are most satisfactory: the cloth doll whose joints are merely lightly stuffed and stitched sections, and the all-wooden doll. Typical dolls of these types are the Chase stockinette doll and the Schoenhut doll. Doll's clothing for children of this age should be very simple. The adjustment of shoes and stockings is beyond the ability of

most of the children, as are also small fastenings, ribbons and hooks and eyes. Dresses made to open all the way from neck to hem like a smock, bloomers held in place by elastic, and sweaters knit so as to be elastic are all satisfactory types of clothing that can be adjusted by the nursery school child.

Certain pieces of doll furniture add greatly to the elaboration of the doll play. Something in the way of a doll bed is almost indispensable. Since most children of this age try sooner or later to get into the doll bed themselves. many nursery schools supply doll beds which are strong enough and large enough to hold a curled-up child. The bed should, of course, be supplied with some bedding, perhaps mattress, sheets, blankets and bedspread. Hemmed squares of colored cotton provide extra covers, extra wrappings for the dolls and frequently supply the material for the children to "dress up" themselves. In addition to the bed there should be some place for storing the clothes. This need is usually met by a doll's bureau, which should be well made with drawers which move easily. A doll buggy is one of the most popular pieces of doll equipment and one which more than anything else seems to bring many boys into the doll play. The addition of doll suit cases, doll chairs, a doll table and a set of nonbreakable doll dishes provides the setting for as complex doll play as the average nursery school child is likely to demand. A screen which suggests separation of the doll corner from the rest of the room may be an addition if it does not actually encourage play which is hidden from the teachers' sight.

Animals. Live animals may be of considerable value in the nursery school if the children have an opportunity to observe them and to assist in caring for them. Such animals must, of course, be selected with care. Perhaps the most practical live addition to the nursery school equip-

ment is the goldfish. These are easily cared for and run little chance of accident. The fish do not suffer from lack of attention over the week-end; if an aquarium is selected which has a steady base there is little probability that it will be tipped over and other types of accidents are infrequent. In three and a half years' experience in one nursery school, one of an original pair of fish lived over two years and the other was still vigorous at the end of the period. During that period the aquarium was a source of constant interest, particularly to three or four children who started almost every day with a trip to the goldfish bowl. The only near-accident occurred during the afternoon milkand-cracker lunch when a four-year-old child suddenly announced that the goldfish looked hungry and impulsively poured her cup of milk into the aquarium before the teacher realized the child's intention. From that incident, however, the whole school learned much about the eating habits of the fish. A canary takes but little more care than goldfish and the children enjoy watching the bird hop about the cage, take a bath and so on. If the cage is occasionally set on a low table and the children are allowed to gather around, much conversation about birds and their habits will arise. In some schools the birds are so tame that, when windows are closed, they are allowed to fly about the room. Other caged animals are desirable, particularly if their visit is limited to a few weeks. The interest of the children is not sufficiently stable to atone for the extra work and the odors connected with long visits of larger animals. Rabbits, guinea pigs, baby kittens, squirrels and the like are feasible for short visits. Any animal which is allowed to run about the room or yard runs the risk of mistreatment. One summer one school tethered a six-inch turtle to a stake in the yard. For three days the turtle was treated with respectful admiration, but familiarity resulted

in attempts to teach the turtle to stand on his head and the staff decided to terminate his visit.

Toy animals have a definite place in the nursery school. A Noah's ark provides animals for animal play and house play, and it also serves as a charming box into which the two-year-old may shut an animal up, take him out, put him in again in delightful and endless alternation. The animals should stand up, should be of durable material, should be washable, should be in approximately the right proportions to each other, and should be painted in the natural colors. If the animals are to be used for true animal play they should not be on wheels. If they are on wheels, the play will be probably merely a dragging the animal around. Such a set of animals is difficult to find though some of the better proportioned of the standard sets of animals can be purchased unpainted as well as in the weird colors in which they frequently appear. It is not uncommon to find a cabinet maker who will make occasional animals or sets.

Puzzles. There seems to be some evidence that interest in puzzles is more or less of a "special ability," but it is one which appears in some children in every group and one in which all children have some slight interest. The simplest type of puzzle is the inset where the picture is complete except for some few pieces each of which fits into only one place. The Montessori cylinders represent puzzles of this type. One of more interest to the child can be made by having the insets colored outlines of common animals, flowers, fruits, etc. The insets may be fitted with small handles to facilitate placing and removing, or the back of the board may be covered with a heavy muslin which permits pushing the pieces up from beneath. More complicated are the true puzzles where pictures (usually of animals) are cut into pieces. All degrees of complex-

ity may be provided by cutting the pictures into few or many pieces, by using diagonal lines and curves as well as rectangular cuts. Stone tiles and various sets of large colored blocks offer material for the making of patterns.

Sand. Sand is a material which is interesting to all young children and may be used either indoors or out-ofdoors. Usually the outdoor sand box is large and placed on the ground so that the children can actually get into it. If this sand is dry, it may be used with funnels, scoops, trowels, sieves, dishes and cups. The indoor sand box is placed on a table of a height convenient for children standing beside it and is usually filled with moist sand. For use with it aluminum dishes and molds are invaluable. Rolling pins, butter paddles, cooking dishes, small trucks, wooden boats, etc., provide more complex play for the older children. Many schools provide sand tables with a four- or five-inch ledge around the sides on which the children may turn out their molded sand. To every sand box a brush or small broom and a dustpan should be attached for even the most careful child spills sand occasionally and part of the regular training should be the cleaning up of spilled sand. Pebbles may be used with the sand or even in place of it since tiny stones lend themselves to filling, emptying and pouring nearly as well as the sand itself.

Clay. A material which in most schools is used only occasionally and then under the supervision of the teacher is clay. Clay may be procured powdered, dry, moist, or in the less sticky but more expensive form of Plasticene and similar products. The cheapest kind is usually the ordinary potters' clay from a pottery. When the clay is in use, it is necessary to provide boards on which the clay may be molded or to cover the table, preferably

with a heavy oilcloth which can be thoroughly cleansed. Aprons of oilcloth or some similar material may be provided to keep the clay off the childrens' clothing. Between usings, the clay is kept moist in earthen jars. For use with the clay, the children enjoy rolling pins, small sticks, wooden butter paddles or molds. Paint may be at hand for the decoration of clay objects which have been thoroughly dried.

Water. Water provides much amusement and much healthful play when used in warm weather or where wet clothing may be quickly dried. For summer play a wading pool is frequently the center of attraction. In some schools this pool is provided very simply by removing the galvanized iron pans which serve as indoor sand boxes from their tables and placing them filled with water on the ground in the play yard. Permanent wading pools may be constructed from concrete. In one school an artificial "lake" of a few feet in diameter has been constructed in the shape of one of the better known city lakes. Another school has constructed a wading pool in the shape of a doughnut, having a concrete platform in the center which is 4 feet in diameter, a channel 3 feet wide and 10 inches deep surrounding this, and an outer wall 6 inches wide. In the central "island" of this pool, there is a socket for erecting an awning umbrella on very warm days. (Fig. 7.) Such a pool should be drained and refilled every day. The children may be given further experience with water by letting them wash the doll clothes and doll dishes or the cups in which orange juice is served to the school. Other types of water play in which the children do not actually get into the water may include play with boats, celluloid animals, soap bubbles, and the like. In any play with water there is always a good chance that the child will get wet.

Beads and pegs. Colored beads of three different shapes (spheres, cubes, and cylinders) may be obtained in either a half-inch or an inch size. If the larger size is chosen, strings with unusually long metal ends should be selected, for the end on the ordinary bead string is too short to be used easily with the large beads. Colored strings are more interesting to the children than the common black string and are not much more expensive. The smaller beads have the advantage of being more comfortably worn after a "necklace" has been strung.

Peg-boards, whose many holes the child may fill with wooden pegs of five or six colors, are ordinarily obtainable in either a six- or ten-inch size. The pegs for the smaller boards may or may not have beaded tops; for the larger boards smooth cylindrical pegs are usually furnished. A sufficient number of pegs should be provided to allow the child to fill the board completely with pegs of one color if he likes.

Paper work. Paper is used by nursery school children in combination with crayons or scissors or paste. Inexpensive manilla paper, paper in a cream or gray finish. and newsprint make satisfactory backgrounds for "pictures." Colored construction papers in a few of the primary colors may be provided for simple cutting and pasting. Enlarged crayons (about % inch thick) are much more serviceable than the smaller crayons and are sufficiently precise for the preschool children. Large leaded checking pencils are more easily manipulated by the small child than the ordinary lead pencil. Blunt pointed scissors are much safer than the pointed and will ordinarily cut with the required accuracy. Paste may be bought in quantity and given to the children a little at a time in small jars. Paste sticks or small stiff brushes are desirable for spreading the paste.

Tools. Opportunity for wood work may be supplied by a low manual training bench or an inexpensive substitute in the form of an ordinary kitchen table with a few vises attached. The tools selected should be of the best quality. The most popular and most easily manipulated tools are hammers and saws. The hammers should weigh from seven to ten ounces, should have a smooth handle, bell face and claw. The head must be securely attached. The cross-cut saw "Junior," twenty-inch size is most used; ripsaws are needed occasionally; hacksaws, coping saws, and the like are not usually popular because of the children's impression that they are not used by carpenters. The wood chosen should be soft and easily worked. Odd-shaped pieces of lumber are more popular than straight lumber. The nails should have distinct heads and should be long enough to be held without danger of pounding fingers. Roofing nails are very satisfactory. For smaller children there may be provided a framed square of cork into which nails can be driven with ease. Later the nails can be pulled out by the teacher and the cork used again. For special groups of children particularly interested in wood work and under the direction of a trained teacher, some of the more difficult tools such as screw drivers, pliers, planes, bit and brace and so on may be used.

Paints. The paint used by nursery children must be a water color for the simple reason that clothes are always spattered and the mother must be able to wash the paint out. Show-card colors are frequently used. Other schools have found the bright colors in Alabastine more satisfactory because powdered paint can be easily stored and a small quantity dissolved fresh for each painting period. Painting at easels is preferable to painting at a table. A double easel provides for two children in a smaller space than two single easels. One school has hit upon a scheme

which obviates the necessity of cleaning many paint pots. This school provides the child with "Lily" paper cups set in a small-sized muffin tin. Each cup holds a small quantity of one color of paint and at the end of the painting period the remaining paint is poured back into the main container and the cups thrown away.

Chalk. If the school is furnished with blackboards, a good quality chalk will be needed. Erasers are a source of much dust and in some nursery schools are supplanted by a damp cloth.

Sewing. True sewing scarcely belongs in the nursery school, but occasionally a four-year-old girl demands the materials for a new dress for some doll. If she is provided with a fairly large sized needle, strong thread and a bit of cloth she may be able to express her ideas satisfactorily.

Books. The books needed by a nursery school are essentially picture books. The almost indestructible linen and linenette books with pictures of trains, boats, automobiles, animals, children, and familiar scenes are particularly adapted to the two-year-old. Durable scrap books may be made from discarded window curtains or by shellacking the pages of a cloth book. Books for the three- and fouryear-olds may frequently be obtained in a resewed library binding. The most satisfactory books for the older nursery school child are those in which the child can retell the story to himself through the pictures. Such books as Peter Rabbit, Little Black Sambo, Johnny Crow's Garden, The Three Pigs and so on are requested again and again. Other books showing farm life, bird life, kinds of transportation. etc., are of never-ending interest and are of great educational value.

Among the books which are most popular with nursery school children are:

My Book of Pets, E. P. Volland (cloth)

The Wooden Soldiers and a Hobby Horse, E. P. Volland

Little Bim the Circus Boy, E. P. Volland (cloth)

Baby Animals, Saalfield Publishing Co. (cloth)

My Twin Kittens, Samuel Gabriel Sons

Friends in Fur and Feather, Samuel Gabriel Sons (linenette)

The Railroad Book, Samuel Gabriel Sons (linenette)

Farmyard Friends, Samuel Gabriel Sons (linenette)

Field and Farm, Samuel Gabriel Sons (linenette)

Peter Rabbit, Samuel Gabriel Sons (linenette)

Buttercup Farm, Samuel Gabriel Sons (linenette)

Peter Rabbit, Frederick Warne and Co.

Three Little Pigs, Frederick Warne and Co. Illustrated by L. Leslie Brooke.

Johnny Crow's Garden, Frederick Warne and Co. Illustrated by L. Leslie Brooke

Humpty Dumpty and Other Rhymes, Frederick Warne and Co. Illustrated by L. Leslie Brooke.

Little Black Sambo, F. A. Stokes Co.

Russian Picture Tales by Valery Garrick, F. A. Stokes Co.

More Russian Tales by Valery Garrick, F. A. Stokes Co.

Farm Book, G. P. Putnam. Illustrated by E. Boyd Smith

Chicken World, G. P. Putnam. Illustrated by E. Boyd Smith

Railroad Book, G. P. Putnam. Illustrated by E. Boyd Smith Seashore Book, G. P. Putnam. Illustrated by E. Boyd Smith

Of the many excellent editions of Mother Goose, there stand out:

Mother Goose in Silhouette, Houghton Mifflin. Illustrated by Katherine Buffin

Mother Goose, Frederick Warne and Co. Illustrated by Kate Greenaway

Nursery Rhyme Book, Frederick Warne & Co. Illustrated by L. Leslie Brooke

National Rhymes of the Nursery, Wells, Gardner, Darton and Co., London

Grannie's, Nurse's, Daddy's, Mother's, Auntie's, and Baby's Little Rhyme Books, David McKay. Illustrated by Willebeek LeMaire Mother Goose, Dodd, Mead and Co. Illustrated by Jessie Wilcox Smith

Very attractive books printed in other languages may occasionally be added to the nursery school collection since the child relies on the pictures of even English books to tell the story.

Sagan om den Lilla Lilla Gumman, Albert Bonnier, Stockholm and New York

Snipp, Snapp, Snurr och de Röda Skorna, Albert Bonnier, Stockholm and New York

Etwas von den Wüzelkindern, J. F. Schreiber, Eblingen, Munich L'été à la ferme et à la basse-cour, Garnier Frères.

Pictures. Pictures may be divided roughly into three kinds: those in books or on cards which the child may take to a table; those placed temporarily on the wall low enough to be studied by children standing in front of them; and those permanently hung on the walls. The pictures for use at a table are largely those illustrating the storybooks discussed above. When a book is so worn as to be no longer usable in its original form, many of the illustrations may be salvaged and pasted on cards. The pictures should be well drawn, many of them colored, and should not have too much detail, or branch too widely from the child's own experience. The temporary pictures hung on the wall should be changed frequently. They may be of almost any kind interesting to children and may be used to illustrate the different seasons, holidays, and so on. The wall pictures may be anything that is good. Colored pictures, such as the large lithographs, and many of the foreign railway posters add much to the cheerfulness of the room on winter days. Pictures of the poster variety may be successfully mounted on heavy cardboard, which is later shellacked and bound around the edge. This treatment does

away with the necessity for glass and is at the same time easily cleaned with a damp cloth. A great favorite in one nursery school is a colored picture of a train taken from a calendar published by one of the large railroads. It is perhaps needless to say that pictures which are good from an artistic sense are preferable to those which are not, but the chief criterion should be whether or not the picture is interesting to the child and whether it is provocative of questions and discussion.

Music. Some of the books of songs which are desirable for the nursery school are:

Old Dutch Nursery Rhymes, David McKay. Illustrated by Willebeek LeMair

Little Songs of Long Ago, David McKay. Illustrated by Willebeek LeMair

Our Old Nursery Rhymes, David McKay. Illustrated by Willbeek LeMair

Songs for the Little Child, by Clara Belle Baker, Abingdon Press First Year Music, American Book Co.

Songs of Childhood, Ginn and Co.

Child Land in Song and Rhythm, Arthur P. Schmidt Co., Boston

Songs of a Little Child's Day, Milton Bradley Co.

Songs to Sing, by Edna Shaw, The Simcoe Co., Buffalo

Music Education, Book II, by Calvin Cady, Clayton F. Summy Co., Chicago

Finger Plays, by Emilie Paulsson, Lathrop, Lee and Shepard Co. Jolly Jinks Song Book, by L. F. Jackson and Edith Reid, J. Fischer and Bros.

Good music for the rhythm work in the nursery school may be found in:

English Country Dance Tunes, Cecil Sharp, Sets I and II, H. W. Gray Co., New York

Music for the Child World, compiled by Mari Ruef Hofer, Vols. I, II, III, Clayton F. Summy, Chicago

Twenty Marches for School Use, compiled by T. W. Surette, E. C. Schirmer Music Co., Boston

Album for the Young and Scenes from Childhood, R. Schumann, G. Schirmer, New York

Fifty Children's Songs, music by C. Reinecke, G. Schirmer

First Year Music, by Hollis Dann, American Book Co.

One Hundred and Forty Folk Songs, compiled by A. T. Davison and T. W. Surette, E. C. Schirmer Music Co., Boston

Vieilles Chansons et Rondes, music by C. H. Widor. Illustrated by M. B. de Monvel, E. Plon Nourrit, Paris

Chansons de France, music by J. B. Wickerman, illustrated by M. B. de Monvel, E. Plon Nourrit, Paris

Child Land in Song and Rhythm, words by H. B. Jones, music by F. N. Barbour, Arthur P. Schmidt Co., Boston

Erk's Deutscher Liederschatz, Band 1, C. F. Peters, Leipzig

School Rhythms for Kindergarten and Primary Grades, E. M. Robinson, Clayton F. Summy Co.

Jolly Jinks Song Book, by L. F. Jackson and Edith Reid, J. Fischer and Bros.

Old English and American Games, F. W. Brown and N. L. Boyd, Saul Bros., Chicago

Children's Singing Games Old and New, compiled by Mari Ruef Hofer, A. Flanagan Co., Chicago

Kling Klang Gloria, E. C. Schirmer Music Co., Boston

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Parade of the Wooden Soldiers, Leon Jessel (sheet music), Edward Marks, New York

Still another oportunity for music is in the use of instruments for a so-called band. The chief requirement of musical instruments for the nursery school is that they be not blown. It is almost impossible to prevent the surreptitious passing of a horn from one mouth to another and the difficulty is most easily met by limiting the instruments to drums, bells, tambourines, jingle sticks, and the like. Chinese drums beaten lightly with the knuckles or

finger tips give a really musical tone. Since a good part of this type of play is the learning to keep time with the music, two blocks to strike together or two sandpaper covered blocks to rub together make acceptable additions to the band.

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CHAPTER IV

THE NURSERY SCHOOL DAY

THE NURSERY SCHOOL PROGRAM

THE program or actual time-schedule will vary from one nursery school to another. The hour for and duration of any kind of activity will be determined largely by the aims of the school, the length of the school day, the climate of the city, the arrangement of the building and the amount of space available. The schedule will to some extent be affected by the age, ability and interests of the children in the school and largely by the interests and abilities of the various teachers.

The program of any particular school will also vary from time to time. Most schools have, for example, somewhat different schedules in winter and in summer. Frequently the schedule may have to be modified to suit the weather on a particular day and it is perhaps unnecessary to say that festivals, special events, such as picnics and excursions, will break up any schedule temporarily. Programs should be gradually modified if the teaching staff feels that a change will better suit the interests of the children.

Even with a most flexible schedule, there are advantages in having a well-planned orderly routine for the events of the nursery school day. This routine is desirable from the point of view of the teacher because there is then less confusion, things go more smoothly particularly when parttime assistants are to be expected from time to time. From the point of view of the child a definite schedule is desirable because he knows then from experience what is going to happen next and thus passes more easily from one activity to another.

In planning the daily program for any school, certain points should be kept in mind. Meals and sleeping-hours should fall at approximately the same hours each day. Apart from these two fixed hours, the schedule may be kept as flexible as possible. Clock-time means little to the small child: his interest and needs should determine the type and duration of any activity. This cannot always be decided in advance. The toilet schedule should allow sufficiently frequent visits to the toilet to take care of the needs of the youngest children, and this toilet schedule may be different for different children. As much time as possible should be kept for outdoor play. The periods in which the child is allowed to select his own activity should be fairly long and preferably uninterrupted by requests from the teacher. The periods assigned to organized group activities are usually not over fifteen or twenty minutes in duration. In general, periods of active and quiet play should alternate. In the free-play period the child will himself vary the type of activity; in the organized group the teacher is responsible for furnishing variety. If one activity is dovetailed into the next the program runs more smoothly than if all the children are expected to shift from one occupation to another at the same moment. For example, when the children are coming in from outdoors, the problem of getting off outside wraps, going to the toilet and getting settled inside is greatly facilitated if a few children come in at a time. Many other schemes may be worked out to make the day go smoothly. If, for example, the rest before lunch comes directly after the music period, the children may proceed to the sleeping room in time to the last selection of music.

Sample programs used by different nursery schools are given below.

PROGRAM OF PLAY SCHOOL FOR HABIT TRAINING, NORTH BENNETT STREET INDUSTRIAL SCHOOL. BOSTON

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8:30 to 9:45 a.m.—Self-directed play in rooms or on roof 9:45 to 10:00 —Music, songs, games or rhythm
10:00 to 10:45 —Clean up and lunch
10:45 to 11:00 —Rest period
11:00 to 11:10 —Story period with older group
11:10 to 11:45 —Work or play period
11:45 to 12:00 —Dressing and dismissal
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This is a flexible program with groups alternating in rooms but often together for the last period. Some directed work is sometimes used with the older group during part of the first period.

MILDRED R. WIMPFHEIMER NURSERY SCHOOL, VASSAR COLLEGE

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8:45 to 9:00 A.M.—Arrival of children
                    Medical inspection
                    Toilet-for younger children
 9:00 to 11:00
                 -Work and play
11:00 to 11:30
                 -Putting away of work and play equipment
                    Getting ready for dinner
                    Rest
11:45
                 -Dinner
12:30 to 1:00 p.m.—Preparation for nap
12:45 to 3:00
                 -Nap
                 -Lunch of milk and crackers
 2:45 to 3:10
3:15
                 -Close of school
```

In fine weather the children spend the morning out-of-doors, coming in in time to wash and have a rest before dinner. After dinner comes the nap.

WASHINGTON NEIGHBORHOOD HOUSE, MINNEAPOLIS

7:30-10:30 —Free play 10:30-10:45 —Cleaning up 11:00-11:15 —Organized group work 11:15-11:30 —Rest 11:30 —Lunch 12:00-12:30 —Cleaning up (brushing teeth, making beds, etc.) 12:30 —Nap 3:00-5:30 p.m.—Free play (orange juice and cod-liver oil)	7:30	A.M.—Children arrive			
11:00-11:15 —Organized group work 11:15-11:30 —Rest 11:30 —Lunch 12:00-12:30 —Cleaning up (brushing teeth, making beds, etc.) 12:30 —Nap	7:30-10:30	—Free play			
11:15-11:30 —Rest 11:30 —Lunch 12:00-12:30 —Cleaning up (brushing teeth, making beds, etc.) 12:30 —Nap	10:30-10:45	Cleaning up			
11:30 —Lunch 12:00-12:30 —Cleaning up (brushing teeth, making beds, etc.) 12:30 —Nap	11:00-11:15	-Organized group work			
12:00-12:30 —Cleaning up (brushing teeth, making beds, etc.) 12:30 —Nap	11:15-11:30	-Rest			
etc.) 12:30 —Nap	11:30	-Lunch			
12:30 —Nap	12:00-12:30	-Cleaning up (brushing teeth, making beds,			
- L		etc.)			
3:00- 5:30 P.M.—Free play (orange juice and cod-liver oil)	12:30	Nap			
	3:00- 5:30 P.M.—Free play (orange juice and cod-liver oil)				

From 3:30 on children go home.

8:45- 9:00 A.M.—Arrival of children

Children begin coming at 7:30 and are supposed to be there by 9.

Mothers start calling for children at 3:30.

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7.20

NURSERY SCHOOL, INSTITUTE OF CHILD WELFARE, UNIVERSITY OF MINNESOTA

SCHEDULE OF DAILY ACTIVITIES, WINTER, 1928

(It should be noted that this schedule is quite flexible, except for the time for music period, lunch and naps).

0.10	0.00 11.111.	
		Inspection by nurse or doctor
9:00-	9:15	-Outdoor play
9:15-	9:30	-Children come in, remove wraps, go to toilet,
		drink fruit juice and cod-liver oil
9:30-1	0:30	—Free play with varying materials indoors and outdoors
10:30–1	0:55	—Preparation for lunch, remove wraps, go to toilet, wash, etc.
		Looking at books
10:55–1	1:10 -	—Music and rhythms for older children—Con- versation for younger children
11:10–1	1:25	Music and rhythms for younger children—Conversation for older children
11:25-1	1:45	—Room 204 rest period for young children (no observers admitted).

11:25-11:45	Rooms 103 and 104, a few older children help in setting tables			
	Room 105 quiet period for the rest of the			
	children			
11:45	—Lunch			
12:15-12:45	-Preparation for naps			
	Younger children begin to go to bed in Room			
	204 (no observers)			
	Quiet play, stories, etc., for older children in			
	Room 103			
1:00	P.M.—Older children begin to go to bed in Rooms 104			
	and 204 (no observers)			
1:45	-Older children begin to get up and have quiet			
	play in Room 103			
2:45	-Crackers and milk in Room 104			
3:00	-Children begin to go out-of-doors to play			
4:00	—All children leave for home			
1.00	124 041404 041 4001 0 104 440440			

THE FREE-PLAY PERIOD

Since the nursery school is planned to be a place where the young child may develop his own abilities under the wise guidance of trained teachers, it follows that the curriculum must provide both for considerable freedom for the child and for alert supervision on the part of the teacher. It is evident that there are certain occupations in which the child can be left practically to his own devices. Activities in which repeated trials using varying sets of muscles are necessary are best learned when the child is left to himself. If we desire, for example, to teach a child to wiggle his ears, we do not say, "Contract the auricular muscles," neither do we move his ears for him. He does not know where the muscles are and he has no notion how to gain control over them. But if the child desires to imitate another child in performing the stunt, he works repeatedly at moving as much of the face and scalp as possible until he finally hits upon the desired result.

Similarly the young child learns to cut better from continued attempts at cutting than from much help, example, or suggestion from the adult.

It is also evident that there are certain events in the daily life of the child when adult control is necessary until the time arrives when the child performs the acts fairly automatically. In the course of years the average child of the fairly well-bred family would come to see that clean hands at meals are desirable, but he might in the meantime have carried into his mouth along with his food sufficiently virulent germs to cause a prolonged physical weakness. It becomes the duty of the nursery school teacher during the school day and of the mother in the home to determine when the child shall be left to his own resources and when he shall be obliged to comply with adult standards. The main tendency of education at the present time is to keep the teacher in the background as much as possible. With this point of view in mind it is well to allow the child considerable time free for occupations which he chooses himself and which he is allowed to develop in his own way provided this way does not interfere with the rights of others.

Free play is the title ordinarily given to occupations which are chosen by the child himself. This time is also sometimes called the "work period" though surely some of the other periods of the day are much more "work" for the two-year-old than are the hours when he runs from one occupation to another. Perhaps the most accurate title would be "the period in which child-control is at a maximum and teacher-control at a minimum."

Experimental data. In spite of the great amount of time spent by all nursery school children in this free play, we have surprizingly little exact information as to what, how, and how long the child plays. A number of the large

nursery school centers have kept fairly detailed records for some time but very little of this has as yet been published. From what little has been published, we learn that the youngest children who play with blocks spend their time carrying them about, handling, manipulating, stacking in irregular piles, with no apparent purpose save the expenditure of energy. Later comes the construction of a fairly elaborate design or a named building. And perhaps not until the stage of kindergarten or first grade comes the structure which is designed to serve an end and which is used after it is made. We read that the two-year-old is unable ordinarily to make a perfect tower with the Montessori pink tower blocks. The first use of crayons is for the satisfaction in "sense and motor terms." Among the older children, more girls than boys are interested in crayons and paints. The girls tend to draw flowers, and subjects related to social or domestic life, the boys ships and engines and objects of mechanical interest. Doll play shows some sex differences by age two. As soon as boys use up the manipulative possibilities of the doll materials, their interest in the play lapses. Three-year-old children frequently expend great care in dressing the dolls and tucking them into bed. The two-year-old children enjoy letting sand run through their fingers, pouring it, filling and emptying pails. At three they begin to make cakes or dig tunnels or build houses.

Bridges reports that of the material available in the freeplay period in the McGill University Nursery School, threeyear-old children played most often with the Montessori cylinders, wooden bricks and the Montessori color pairs. These children showed some slight sex differences. "The boys seem to show a preference for building with large bricks, an occupation which involves movement of the larger trunk, arm and hand muscles. It involves considerable movement in walking about, getting up and sitting or lying on the floor. It allows much freedom of action,

ling into play combinative ability and originality. The wils on the other hand show preference for fitting cylinders of graded size into holes, and color matching. Each of these occupations requires less activity than brick building as the child has to sit at the table to do them. Fitting the cylinders calls for visual discrimination of size, color matching requires ability to discriminate colors; and both occupations involve finger manipulation as well as the larger arm movements. Both tasks also involve willingness and ability to follow instructions and do not call for originality." The girls' interests are somewhat more diverse than those of the boys. The occupations selected least often by this group of children were: the Montessori pink tower, using the brush and dustpan, the lacing frame, and playing with stuffed animals and the china tea set. The median length of time spent on the lacing frame was three minutes, and at brick building fifteen minutes. More general observations on kinds of play are frequently recorded. Companionship for the two- or three-year-old is pleasant but not as necessary as it is for the older children. The activities of this period are largely individualistic and self-centered. Even with the four- or five-year-old, constructive efforts which are absorbing one hour or one day are often forgotten the next. Activities involving cooperation are rare in two- and threevear-olds, more frequent in the four-year-olds.

It is rather striking that when an author compares the four-year-old child with the child of school age, the younger child is described as flighty in attention, disinterested in construction, exhibiting very little coöperative play. When the child of the same age is compared with younger children, it is to the younger group that these phrases are applied.

CHAPTER IV

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The program of any particular school will also vary from time to time. Most schools have, for example, somewhat different schedules in winter and in summer. Frequently the schedule may have to be modified to suit the weather on a particular day and it is perhaps unnecessary to say that festivals, special events, such as picnics and excursions, will break up any schedule temporarily. Programs should be gradually modified if the teaching staff feels that a change will better suit the interests of the children.

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It is rather striking that when an author compares the four-year-old child with the child of school age, the younger child is described as flighty in attention, disinterested in construction, exhibiting very little coöperative play. When the child of the same age is compared with younger children, it is to the younger group that these phrases are applied.

During the past few years at the University of Minnesota, two groups of undergraduates have kept records on the activities of the children in the nursery school. The first group was interested in the type of activity shown by the different ages and sexes. Observations lasted for fifty minutes and during that time various two-year-old girls were reported occupied as follows:

- 1. Using rolling pin in the sand. Other children at the sand box, but there was no social play. Very little conversation. Quiet, apparently planless, some evidence of imitation of other children.
- 2. Played with blocks, then doll buggy, then sand with car and trowel. Spent considerable time watching other activities going on about her. Talked but little. Play was chiefly nonsocial and without plan.
- 3. Played with various utensils at the sand table. Left to play with wooden train. Spent much time watching other children at play. Did not speak. No evidence of imaginative play. Did not enter into play with other children at all.
- 4. Cut paper into scraps. Put some pegs into peg-board. Played at sand table with cup and boats. No playmates. Seemed to ignore other children utterly. No conversation. No evidence of plan. Very quiet.
- 5. At the sand table alone for a time. Then walked about the room, but paid attention to no one except one teacher. No conversation. Quiet, self-sufficient, nonsocial. Planless.

Two-year-old boys were recorded as occupied as follows:

- 1. After washing his hands at request of teacher, played in turn with engine, doll buggy, kiddy car, teeter, piano, slide. He did not talk at all. Was very active, nonsocial. He seemed to be unaffected by the other children in his shifts from one occupation to another.
 - 2. Played with train, sand, piano, books, wooden shoes,

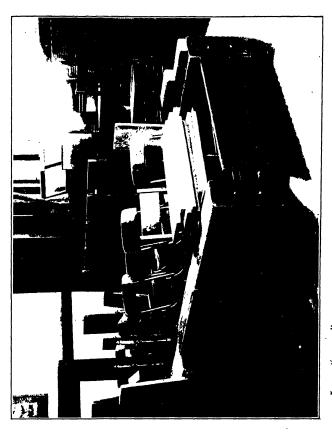


FIG. 5.--A "MOVIE" CONSTRUCTED BY A GROUP OF FOUR-YEAR-OLDS. THE PILE OF BOARDS ON THE FRONT CHAIR IS THE "ORGAN," THERE WAS NO PICTURE OR PERFORMANCE.

doll furniture. His attention shifted rapidly. He rushed from one thing to another. Played occasionally for brief moments with another child. Friendly toward others but independent. Watched other children playing trains. Talked little except to make his wants known. Active. Vivacious. Interested in everything.

- 3. Played with truck, box and trowel in the sand box. Play was parallel to others, but not social. He was active, persistent, and showed much repetition in his activity. Spoke a few phrases of baby talk.
- 4. Played with doll buggy, vise on worktable, sand, drinking fountain, kiddy car, slide, teeter, wagon, rocking-horse, trains. Had few playmates. Occasionally followed the lead of another child for a few moments. No talking. Quiet. Play apparently planless. Somewhat imitative. Easily satisfied.
- 5. Played with engine, cars, slide. A follower. Ran after other children. Spent most of the time watching others play. Very little talking except when he wanted something. No evidence of plan or of imaginative play.

From these records which have been taken by chance from a large number, it seems evident that the average two-year-old child is essentially nonsocial, though he may be interested in other children to the extent of spending considerable time watching them. He is apt to shift rapidly from one occupation to another; he is more likely to play at the sand table than with any other one piece of equipment, and he talks but little.

Some summaries of the activities of three-year-old girls are:

1. Left the sand table for the doll corner, where she played house. Very sociable and amiable. Willing to take any part assigned in playing house. Watched no other activities. Talked a considerable amount. Played she was

sick and tucked herself into the doll bed. Coöperative, social, active, planful.

- 2. Played on the swing, teeter, packing boxes. Tried to get into a group of older children, but was not accepted. Talked but little. Restless, social, planless, flighty, dissatisfied.
- 3. Played with sand, doll furniture, train, piano, jumping rope. Seemed to be a leader of a small group. Paid little attention to other activities going on around her. Talked a fair amount, especially when playing house. Quite a bit of imaginative play during the house play. Got into the bed, pretended to be ill. Active, social.
- 4. Played with blocks, coats and hats in locker room (until stopped) wooden shoes, doll furniture, crayons, jumping rope. Seemed to be chiefly a follower. Social. Kept busy all the time herself, did not watch any other play. Talked quite a bit. Seemed to enjoy herself. Little imaginative play. Active, social, imitative.
 - 5. Played with sand, paper doll and paste, paper and scissors, crayons. (Left sand table at request of teacher after she threw sand on a small boy.) Was sometimes a leader and again on an equal footing with the others. Watched no other activities. Talked much to different children. Sang to herself. Made noises which she seemed to enjoy. Made sand "cocoa" in a cup. Active, restless, social part of the time, easily distracted, original, no well-organized plan.

From the summaries on three-year-old boys:

1. Played with pegs and peg-board, train, cooky-cutter and sand, played train on the workbench. Was sometimes an equal, sometimes a follower. Watched other children several times, played he was passenger on workbench. Slow, deliberate, absorbed in what he was doing, imitative, persistent, satisfied.

- 2. Played with wooden and iron trains beside but not with another boy. Little talking. Fairly active, persistent. Little evidence of imaginative play.
- 3. Played with doll buggy, pegs and peg-board, metal bottle-cap, iron truck, sand, kettles, pans, trains, blocks. Not a great deal of talk. Showed off peg-board to some other children. Put blocks into train for freight. Quiet. Neither a leader nor a follower. Little social play.
- 4. Building house with blocks, paper and scissors, train, boat. Most of the time a follower. Too much interested in his own activity to stand around and watch others. Considerable talk about the wrong way in which one of the other boys was building the chimney. Active, social, planful, persistent.
- 5. Played with trucks, his own cap, the vise on the workbench, a wagon. He leads one child and follows another. Watches other children playing train. Talks a little, plays a box is a train and he is a conductor. Social, imitative, active, persistent.

In these records the three-year-old children are clearly differentiated from the younger ones of the preceding group. We continue to find many shifts in occupation during the hour, some tendency to spend time in watching other children, considerable nonsocial play; but we find on the other hand a definite gain in the amount of talking, the amount of plan evidenced, the amount of imagination entering into the play, and the amount of social play.

From the summaries of four-year-old girls:

1. Played at the table with paper, scissors, crayons. Had a sort of motherly attitude toward the other children at the table. Very willing to help younger children and much interested in what they were doing. Definitely a leader. Watched only the activities at that table. Talked quite a bit. Quiet, social, original, planful, persistent.

- 2. Played with paper, scissors, paste, crayon. Neither leader nor follower. Talked incessantly about everything. Made a "garden." Active, social, original.
- 3. Used paper, scissors, paste, crayons. Neither leader nor follower. Talked some but most of the time engrossed in her activity. Quiet, social, imitative, persistent.
- 4. Busy with paper and scissors, needle and thread. A leader. Watches others occasionally. Talks most of the time with other children and with teachers. Sings to herself. Active, restless, social, original, planful, fidgety, rather noisy, persistent.
- 5. Played with dolls and doll furniture. A decided leader. Interested in other children's activities. Talks a good deal. Commands other children and they look up to her as a leader. Capable, active, original, planful.

From the summaries on four-year-old boys:

- 1. Busy with books, tables and chairs, doll furniture, suit case. A distinct leader, quite dogmatic in his demands. Instigates the play and plays well with the other children. Seems to take more or less responsibility towards the smaller children. Watches other activities closely and gives the other children suggestions even though he is busy himself. Talks a great deal. When playing house he was the doctor and asked one of the four-year-old girls to play she had a "bad cold and bad heart." Very active, enters into play heartily and cheerfully.
- 2. Sand with cooky-cutter and rolling pin, clay with sticks, knife, suit case, workbench. A leader who occupies the center of attention. Talks almost continuously. Extremely active, much imaginative play, social, something of a bully, very noisy, original.
- 3. Busy with blocks and train and sand. A leader but ready to listen to suggestions. Watched over children a little. Talked a good deal. Considerable imagination evi-

dent in his building. Restless, social, original, planful. He settled a dispute between two other children.

- 4. Played with sand and kiddy car. A follower. Watched no other activities. Talked only a little. Entered group play but only as a follower. Quiet, social, planless.
- 5. Played with sand, kiddy car, scissors, crayons, wagon. A leader of other boys, an equal with girls. Fairly steady conversation. Active, social, imitative, original, persistent, cheerful, cooperative.

One of the most striking differences between this group of four-year-olds and the younger children is the great increase in the use of paper, scissors, paste and crayons. Other differences are the much greater amount of conversation, the development of more social play, the development of leaders and followers, and the decrease in the number of occupations attempted during the hour. This means, conversely, longer periods spent at one activity.

Another kind of observation which has been carried on at the University of Minnesota was made by a group particularly interested in play materials. In this study each student confined her observations to one type of play material and reported on the activities of all children who played with that material during her hours of observation. Only a few types of material were studied and these were selected for observation by varying numbers of students. Comparisons between play materials, therefore, cannot be made with any great degree of reliability.

Block play. Blocks were found to be most popular with the older children and more used by boys than by girls. The group playing blocks together was usually not large. The play persisted on the average for about fifteen minutes for the four-year-olds and about ten minutes for the two-year-olds. The play was initiated by the child himself more often than not and very seldom required any direct supervision from the teachers. The block play was almost always solitary for the two-year-olds and was described as "social" for a little fewer than half the observations on the four-year-olds. Conversation with adults was usually lacking at all ages but conversation with other children is reported as "fairly steady" with age four about half the time. and as "occasional" most of the rest of the time. Conversation with other children or with adults occurred but seldom at age two. The type of play shown by age two was very simple and seldom gave any evidence of a plan. In fact, a definite plan appeared in not quite half of the records on the four-year-olds. Types of activity recorded for the youngest children included more or less random behavior, pushing the blocks around, carrying them from place to place, running up and down on them, piling them up, laying them in a row whereas with the older children we find the building of houses, forts, a jack-inthe-box, railroad tracks, garages, roads for trucks, stalls for hobby horses, and bridges for trucks to pass over or under.

Doll play. Doll play appeared to be most popular at age three, and more popular with girls than boys. The play averaged about fifteen minutes or a little more for the older children, slightly less for the youngest children. There were usually two or three children playing dolls at the same time and there is some evidence to show that boys seldom went to the doll corner unless there were other children already there. The girls seemed to be less influenced by the presence of others. The play was usually initiated by the child himself. One rather amusing finding is that although in 7 per cent of the observations on girls the activity was started or suggested by the teacher, there is no record of an instance where a teacher suggested doll play to a boy. It is impossible to say whether the teacher's suggestions

were based upon previous experience with the occupations which usually appealed to an individual child or whether she was being influenced by the old notion that boys are not interested in dolls. The doll play is described as solitary about a third of the time for three- and four-year-old children and about half the time for the two-year-olds. Social play appeared in about half the records for the four-yearolds. Once more the two-year-old children talked but little and the older children talked a considerable amount. The play of the two-year-olds was usually a simple, repetitive performance with no purpose evident save the pleasure in handling the doll. They spent considerable time in holding the doll, putting her to bed, attempting to dress and undress the doll and wheeling her about in the doll buggy. The play of the older children, while still showing much repetition and much apparently purposeless play, did show minor variations and some definite planning, especially of family and household play. They frequently assigned characters to different children, "cleaned house," "moved," had "dinner," cases of "measles" and so on. When we compare the records of boys with those of girls we find the boys interested in the family or doll play to the extent of being "Daddy" and "going to work" or being the doctor and "operating" on the sick doll. Other than this their interest seemed to center around the doll buggy and the manipulation of its wheels, bolts, hood, etc. The girls seemed to enjoy dressing and undressing the doll, putting her to bed, singing to her and taking her for rides in the buggy.

Sand play. Sand was popular at all ages, though it was perhaps not used by the four-year-old children as much as by those of two and three. The play frequently persisted for twenty or thirty minutes. Here, again, the duration was a few minutes shorter for the two-year-olds. The play was practically always initiated by the child himself except

when a new child was taken to the sand box by the teacher. The sand play required practically no supervision except when an occasional child threw sand or claimed more than his share of the sand box. The play of the younger child was usually solitary or parallel to that of some other child. The four-year-olds showed considerable social play, but the sand apparently did not stimulate to social play as did some other types of material. Conversation with other children was again fairly steady with the older children and almost always lacking with the younger. There was practically no conversation with adults. The play of the twovear-olds was very simple. If the sand was dry as in the outdoor box, they let it run through their fingers, poured it out of cups and so on; if the sand was damp, they squeezed it, patted it, and tried to make little cakes. The older children also did considerable manipulating but the three-yearolds spent much time in making cakes and pies, filling trucks and dumping them out. The four-year-olds added more complex play, ran a restaurant, had a dinner party. built tunnels for trucks to run through, built rivers, hills and roadways. The two-year-olds spent much time watching other children. No sex differences were clear in sand play, though some observations suggested that girls use more dishes in their play and boys more trucks. Older children used more accessory toys with the sand than did the younger. The two-year-olds played with the materials at hand but although they knew where the sand toys were kept they seldom turned to the basket to get anything, whereas the three- and four-year-olds often searched for some particular piece of equipment. "Sand can satisfy any part of the older child's imagination. It can be water, milk. lemonade, cakes, pop corn, ice cream and the same mound of ice cream may in turn be a house." There is some indication that children who are particularly fond of boisterous

play did not choose sand as frequently as those who prefer quieter play.

Clay play. Clay was interesting to all the children, though rather more observations were obtained on the older than on the younger children. In general the children remained at the clay table about twenty minutes. The stay of the older children was usually terminated by the completion of the project which they had undertaken. The younger children left the table because of loss of interest or attraction to some other occupation and it was impossible to guess from the piece of clay which they left how long they had been at the table. In at least a third of the observations a teacher sat at the table with the children and at these times the interest was much keener. There was very little truly social play at the clay table, though there was considerable conversation among the older children and with the teacher. The activity of the two-year-olds was usually limited to patting, poking holes with finger or stick, pulling pieces of clay off the lump and attempting small balls. Occasionally an accidental result would suggest a name. The four-year-olds attempted more difficult molding: birthday cakes, lollipops, birds' nests, cradles and the like. The results were very rough and frequently could be named only by the maker. When there was no supervision, there was a greater variety of end-products but the end-products were less numerous.

Play with gymnasium apparatus. Vigorous types of physical activity were more frequent among three- and four-year-old children than among the younger ones. The play lasted on the average from fifteen to twenty minutes, though the time spent at any one piece of apparatus was much shorter. The two-year-olds showed somewhat greater persistence at this play than did the older children. Once again the older children showed more social tendencies in

that they were more likely to join other children already at play than were the two-year-olds. The play was usually initiated by the child but in about a third of the observations there was some supervision by the teacher. There were more observations of teacher supervision with the four-yearold children than with those who were younger and there were more records of teacher supervision over the girls than over the boys. The play of the two-year-olds was usually solitary or parallel to that of others; that of the four-year-olds was usually social or parallel to others. Conversation with others was in general lacking at age two but was at least occasional for almost all the records on the four-year-olds. Little of this type of play seemed to be definitely planned. The swings were particularly popular with the two-year-olds. Some of these children could "pump" but most of them simply sat in the swing or were pushed by others. Other two-year-olds slid (usually in the sitting position), teetered, climbed on low boxes and tried to climb on the rings. The older boys spent much time in the rocking-boat, sliding down the slide in extraordinary positions, climbing ladders, swinging in combinations on the single strand of the giant stride and getting on the trapeze. The teachers spent considerable time at the swings helping the vounger children on and off and seeing that each got his turn. The apparatus was frequently used by the older children in combination with some other play. A group of children playing house in the piano box would "go down town" by taking a trip down the slide. No sex differences in the use of this type of apparatus were apparent. Considering all the children of all ages together the popularity of the different pieces seemed to be: first the low swing, then the rocking-boat, slide, strand of giant stride, trapeze. teeter, walking-board and packing boxes. It so chanced that our climbing fence (Fig. 2) was not usable during

this series of observations and thus could not take the place near the head of this list which it undoubtedly would have occupied.

Table play. Under table play we have grouped together work with beads, peg-boards, paper, cravons, and scissors. All these materials are kept near one table in the Minnesota nursery school and as a result in one group gathered around that table several of these occupations will frequently be represented. Table play was clearly more interesting to the four-year-old girls than to any other group, though we have some records for both sexes at all ages. The play lasted for fifteen or twenty minutes, with the older girls staying for the longest periods. A group of two or three children usually were at the table together. The play was usually initiated by a child though not infrequently the activity was suggested by a teacher to some of the girls. There is no record of a teacher suggesting table play to a boy. Table play was never reported as directed by the teacher and very seldom was it said to be even supervised. The play was practically never social except that the older children carried on intermittent conversations with others at the table. There was little evidence of definite planning. Typical activities of two-year-olds were: random insertion and removal of pegs, stringing a few beads, cutting paper into scraps, scribbling. The older children, on the other hand, made strings of beads with a simple, definite pattern, made patterns with the pegs in the board, drew recognizable pictures, made paper books, cut out jack-o-lanterns, "air-kites," baskets, chains, "peeka-boos," and horns.

Play with kiddy kars. Both sexes and all ages enjoyed the kiddy kars but they were used most often by the threeand four-year-old boys and least by the older girls. The play persisted from ten to twenty minutes with somewhat

longer intervals for the younger children. The play was more often solitary or parallel than social. Practically the only truly social play occurred when the kiddy kars were used as accessories to some other play, an automobile, a boat, fire engine, an ambulance, or a tractor. Never was the kiddy kar play actively directed or supervised by a teacher. Conversation was frequently lacking and was seldom rated as "fairly steady." The younger children often sat for comparatively long periods on kiddy kars, while they watched other children at play. The older children rode around more. sometimes varying the activity by racing with each other or by bumping into everything and everybody available. Those kiddy kars having pedals were most interesting to the older children. The younger children often attempted to manipulate the pedals but soon gave up the attempt and went back to propelling the car with their feet on the floor,

Play with trucks. The trucks considered in these observations were steel trucks about two feet long in which the child could kneel or sit and move about. The nursery school at Minnesota owns two of these and several of the older boys brought similar trucks from home every week. Play with the trucks was limited to ages three and four and in this group but one girl appears. Whether or not the other children would enjoy the trucks we cannot say for no attempt was made to prevent the older boys from monopolizing them. The play persisted usually twenty-five or thirty minutes and was in large part social or at least parallel to the play of others. Conversation was of necessity occasional since the trucks were in almost constant motion. The play consisted in riding around with one knee in the truck or in piling blocks in the truck and pushing it around or dumping them out again. Occasional variations were races, wrecks, "traffic jams," repairs to tires and engine at



FIG. 6,-VARIETIES OF WHEELED TOYS IN A LEVEL YAND.

the "garage" and fulfilling the duties of a fire engine at a "fire."

Water play. Water play in the wading pool was more attractive to the older children and somewhat more attractive to boys than to girls. The play persisted for half or three quarters of an hour at a time. The pool never lacked occupants on the days when it was filled with water. The older children went to the pool of their own accord but the two-vear-olds were taken by a teacher or by an older child. Supervision from the teacher was needed in about a quarter of the observations on four-year-old children and in as many as two-thirds of the observations on two-year-olds. There was a great deal of conversation among the threeand four-year-old children and rather more than at other occupations among the two-year-olds. The play was generally simple walking about, splashing or sitting on the edge of the pool with the feet dangling in the water. The four-year-olds developed some group plays such as having a group of "dogs" who "swam" out for sticks thrown in by other children, or "fishing" from a bridge across part of the pool, or building a "diving board" from which to jump. No difference in the play of girls and boys was apparent. (See Fig. 7, facing page 124.)

Use of other materials. Not all types of play equipment which are available for play are represented in the studies reported above, and for the kinds not recorded our conclusions must be based on the opinions of teachers and assistants in the school. Wooden trains are very popular, particularly with the older boys. The manual training bench appeals to all ages though few children less than four years old persist at their sawing or hammering long enough to have an end-product. Painting also is interesting to all ages and both sexes and shows some few definite tendencies. The youngest children make a few straggling

marks and leave, older children work patiently until every part of the paper is covered with color, still older children announce first what they intend to paint and then make a recognizable representation. Sewing materials are seldom requested, and then almost wholly by the older girls. The piano fascinates a few children, mostly those who have no instrument at home. The hobby horses are used in connection with group play by the older children. Books and pictures are of interest to all ages and are frequently selected by the children although this school does not encourage their use during the free-play period.

Conduct of the free-play period. The conduct of the free-play period may be left largely to the children themselves. The teacher, however, is responsible for the provision of a wide range of play material, material which is simple, material which can be used in constructive work, and material which encourages bodily activity. This material should appeal to the interests of different children, should give them a variety of experience and offer them an opportunity to experiment and acquire skill in different kinds of occupations. A large variety is desirable since change of activity prevents overfatigue and strain.

The material, once selected, should be easily accessible and should be arranged invitingly around centers of interest. Concentrating the doll material in one corner will stimulate doll play. A block corner or a workbench offering a variety of tools will attract many children. Grouping the material likely to be used for table play, such as beads, pegs, paper, crayons, and scissors will suggest many possibilities which pass unnoticed if paste is in one place and scissors are in another.

Having provided the children with a stimulating environment, the teacher should leave them as much as possible to their own devices. She should be present to supervise and help when needed but she should refrain from too close direction of the activities. There should be as few rules as possible and these should grow out of concrete situations easily understood by the children. The necessity for taking turns when the material is limited, and questions of property rights are readily comprehended. The teacher has an opportunity to teach care and right use of materials. She may also be able to raise the standards of work. She must remember, however, that children of this age are interested primarily in the activity itself, and that too great emphasis on special technique or completion of the product may nullify interest and so defeat its own end. Any instruction in technique is best given individually rather than to the group and should be offered only after the child has had plenty of opportunity to experiment and test the material for himself.

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CHAPTER V

PLAY, MUSIC, AND LANGUAGE ACTIVITIES OF THE ORGANIZED GROUP

The well-adjusted school child will be able to occupy himself profitably whether he play alone or in a coöperative group of other children or in a group directly under the control of an adult. The younger child should be in the process of acquiring these abilities, and should be given opportunity for their exercise. The nursery school cannot be expected to provide for completely solitary play and must leave that duty to the home. Most schools, however, provide not only for the group play of children under a minimum of adult supervision but also for some simple form of organized group in which the teacher is the leader. The proportion of time devoted to play under adult supervision will depend chiefly on the value which the particular school places upon the teacher-controlled work.

Child-controlled vs. teacher-controlled group. The child-controlled, teacher-supervised group has certain distinct advantages over the teacher-directed group. The child-controlled group is a much more elastic and shifting group, which allows almost complete individual freedom and one which permits certain activities impossible in an organized group. The child in the unorganized group is free to learn from unrestricted investigation, manipulation and experimentation with materials and objects in his environment. The child needs a great deal of physical activity, climbing, swinging, pulling wagons and running. This type of play

can be either individual or part of a very loose organization. The young child also needs social experience of the rough and tumble variety popular in a group of children of the same age not under too close supervision. Such play is often an end in itself but if introduced into an organized group, it interferes with the coherence of the group undertaking. Perhaps the greatest advantage of the child-controlled group lies in its very naturalness and freedom from strain. The fact that the group is quietest when under the close direction of the teacher may lead to the supposition that because he is quiet the child is relaxed and resting. On the contrary, except for brief moments or times of extreme fatigue, it is harder work for the young child to sit still than it is for him to be exceedingly active. Proof of this may be found in the undesirable forms of behavior which arise quickly if the teacher prolongs the formal period. Often restlessness and inattentiveness show themselves first. Then unless the teacher promptly breaks up the group or gives them some kind of lively activity, the children begin to tease each other, talk or deliberately try to annov the teacher.

Although the advantages of the informal groupings arranged by the children are sufficient to warrant the school in planning most of the day's occupation for that type of play, nevertheless the teacher-controlled group has advantages sufficiently important to give it at least a short period in the school program. In the first place, if the period is kept brief it may provide a time for physical relaxation. Some children need to be taught how to relax and this is helped by the quiet room and the low voice of the teacher or music. Perhaps more important than the quietness of the individual child is the fact that all the others are quiet at the same time. The organized group also provides a social relationship which is less crude than the rough and tumble

child discipline and justice of the playground. In a sense this may be thought an unnatural situation, but it provides the setting for the development of an attitude of politeness and consideration for the rights of others which develops slowly and which is essential for the adjustment of the child. In their free-play time the children learn to respect others' property rights; in the organized group period they learn to recognize the rights of others in less tangible respects. They learn to be quiet so that others may hear the story or the music. They learn to refrain from crowding around an interesting picture or toy because such actions will cut off the view of other children. They learn to take turns in talking or in choosing, and above all they learn to abide by the group choices.

Besides social training, the organized group provides for the presentation of material which is suitable and interesting but which can scarcely be developed without a teacher to carry it along. Singing and rhythms, stories, rimes and simple games are all interesting to the nursery school child but will develop only incidentally unless a teacher directs the work. The organized group also provides an opportunity for the exchange of ideas, for adding to the child's fund of information and for giving him new experiences. This factor is not so vital for the nursery school as it is for the kindergarten and it can easily be overstressed in work with the younger children. Usually the subject matter under discussion will come up naturally, growing out of the interests of the children. A rain song will be presented on a rainy day: a passing train may give rise to a dramatization of travel: a new tov will arouse many questions; a festival, a birthday, or falling leaves will suggest topics for discussion or interpretation.

'Types of organization. The organized group flourishes under a number of titles. It may be called a "ring" or

"circle" from the fact that the children are seated in such an arrangement. It may be called "news" if the period centers about objects or other "news" which the children bring from home. It may be called simply the "story period," "conversation period," or "music period" because of the nature of the material presented.

Sometimes the group period is a more or less formal occasion similar to the old type of kindergarten morning circle. Most nursery schools have a definite organized period in their program in which the same group of children is gathered together at the same time each day. The children may assume more or less responsibility for the group but the teacher has an active part in the organization and is thus able to introduce a wider range of material than would otherwise be possible.

Other schools provide for only very informal groups that have no regular time of meeting, but which may develop at any time during the day without specific planning by the teacher. These groupings grow naturally out of the nursery school situation, out of the play interests and activities of the children. In this kind of organization the activity comes spontaneously from the children or is suggested by them and the teacher's part is to seize the interest when it arises and guide it into a productive form.

Between these two extremes there is the possibility of infinite variety. Nursery school procedure has not been standardized, and it is to be hoped it never will be standardized to the point of prescribing definite activities for the group period. The teacher should be left free to fit the activities of the school to the particular group and the particular occasion. Participation in group activity may be voluntary or compulsory. This will depend in part on the age and degree of self-control exhibited by the various

children and it will depend in part on the attitude of the teacher toward group work. Whatever the age of the children and the attitude of the teacher, however, many schools will find it necessary to expect every child to join the group for the simple reason that there may be no other place available in which he may play. The children of many nursery schools are divided into small sections for this period. The attention of a group which varies in age from two to four years is difficult to hold. Material which is sufficiently simple to interest the youngest children is likely to bore the oldest. When the group comes together the children may sit in chairs, on rugs or on the bare floor. They may sit in some definite arrangement such as a circle or gather informally about the teacher, who may herself sit on the floor or on a low chair. Many other variations will appear from one school to another.

In addition to the schools where, as in each of the types suggested, the children are given the opportunity and encouraged to take part in a group period, there is the school where the children are merely exposed to music and language without having their activities directed by suggestion or by limitation. This is found in some of the experimental schools which are keeping careful records of the child's free responses to music and literature and which are attempting to work out some sort of educational theory. The music in such a plan consists almost wholly of instrumental selections and songs sung to the children. The children may respond individually and spontaneously by rhythmic movement and vocalization or they may give no indication of response. No songs or rhythmic responses are taught, the children are held together by no group organization and no attempt is made to persuade the child to listen to the music or to do what it says. They may, however, be limited in play which for some reason interferes with others who are listening. The teacher here is observer and recorder, not director.

The music period. The organized periods fall generally into music and language work each with its own specific aims. The music should provide a form of self-expression. Such expression may be active participation in singing, in rhythmic dramatization and in musical games, or it may be the passive sort of appreciation of instrumental or vocal music produced by others. The more the child contributes to the period through taking his turn in choosing activities and in participating in the activity itself, the keener will be his enjoyment and the greater his profit. A second aim of the music period is to give joy to the children. The enjoyment and satisfaction which the children get from the music period is sufficient in itself to warrant its inclusion in any nursery school program. The period may be made so attractive and interesting that the children consider participation a privilege and the question of compulsory attendance never arises. A third aim of the music period should be to develop musical appreciation through familiarity with good music. Worthy standards can be built up by giving the child contact with the best. The school has an unusual opportunity to build up a musical background of acquaintance with the classics. Many homes fail entirely to provide this type of musical experience and the school should feel responsible for the presentation of only beautiful and artistic selections.

The music period, like any other organized hour, should be relatively brief. Most schools find that they obtain the best results from a period of only ten or fifteen minutes duration. During the period, physical activity and quiet listening should alternate. Too prolonged inaction will result in restlessness; too prolonged activity will be overstimulating and will tire the child. If possible the music group should be kept small and homogeneous as to age and musical ability. In large groups, the stimulation is considerably greater, the attention of the children is harder to gain and to hold, and the opportunity for each child to participate is much reduced. The smaller groups are also much less wearing on children and teacher.

Selection of Music. The program of any particular music period should be determined by the abilities and interests of the children in that group. The activities offered to the two-year-old children should be very simple, while fairly complex responses may be expected from the older children. The music period should be related to the activities of the child at other times in the day. If the teacher bears this in mind, she can supply music representing trains on days when train play has predominated, she can suggest Indian dances if the school's interest has centered about Indians, can provide church music if the children start a discussion of a trip to church and can, of course, provide music appropriate to the various holidays, particularly Christmas and Easter.

In selecting music for the school, the teacher should avoid all that is cheap and trashy. If the teacher lacks confidence in her own ability to select music, she will seldom go wrong if she keeps closely to the simple classics and old folk melodies. There is a place for a great variety of different kinds of music, expressive of different ideas and moods. Children understand and enjoy most readily music which depicts such familiar ideas as lullabies, trains, and the sounds of animals. The selections used should be simple in character and short. The child's attention shifts rapidly from one thing to another and it is poor technique for the teacher to present a selection which she knows is too long for the child's span of interest.

All the music should be presented artistically. If the

teacher is merely a one-finger artist, it is better to confine the music to good selections on a Victrola. The ideal pianist for the nursery school music period is one who knows her material so well that she can watch the children and adapt her playing to their reactions. She should be familiar with many types of music so that she can supply any kind called for and she should be able to improvise sufficiently well to pass from one type of music into another or to prolong a particular selection till the group reaches a logical stop. An additional service may be given by the music period if in addition to the usual piano and voice selections, performances on other instruments such as violin, flute and drum are included at times.

Music to be used for rhythmic activities should have still other characteristics besides those suggested for music in general. For this part of the period the music should show a well-defined rhythm. It should suggest some rhythmical activity within the child's experience and call for only one response at a time. Care should be observed to limit the amount of very exciting or stimulating music presented in any one period.

Certain standards are desirable in the music for songs to be sung by the child. Generally speaking the songs should lie in the octave E to E', and should be short and simple in form. The content should be interesting and should concern familiar incidents. Although the children may highly enjoy a song whose theme is utterly beyond their comprehension, they enjoy still more a song which they understand. The simple situation and the familiar terms used in "Tiny Man," "Rockabye Baby" and "Jack Horner" probably account in part for the popularity of those songs among the children. If the child does not understand the actual words, he is likely to substitute words which have a real meaning for him. Nancy was a two-year-

old child who had great difficulty in remembering to pull the stopper from the washbowl when she had finished washing her hands. The teacher in charge of the toilet room got in the habit of saying each day "Nancy, pull out the plug." After a few weeks the music teacher discovered that Nancy was reinterpreting "Little Jack Horner" to say "He put in his thumb and pulled out the plug and said, What a smart boy am I!"

The melody should be appropriate to the thought and words and should be limited to a few tones. Some children's songs are built on only two tones. An example is the familiar "The cow says Moo, there's milk for you" where the air is merely "G C C C, G C C C."

Music which is sung or played to the child may be almost anything which is good and has a definite air or rhythm. The songs need not be in English though most of the favorites are ones whose words are understood. Many good instrumental and vocal phonograph records may be obtained which tell the story of a huntsman, of bird calls, of galloping horses, or of many clocks in a clock store and these are a source of constant delight to most young children.

Responses to music. The responses of the nursery school child to the music are varied. The earliest response found is the carrying over into bodily activity of the rhythm which the child hears. In the nursery school the rhythmic response may be developed into actual keeping time to the music. If a well-marked rhythm is presented, the children may join in the expression by clapping their hands, by clapping two blocks together, by stepping or by stamping in time to the music. Certain contrasts in rhythms may be brought out easily if not too many are presented in close selection. The nursery school child ordinarily takes as a sort of game the differentiation between fast and slow, loud

and soft, high and low, and heavy and light. When they have learned the gross distinctions, finer shadings of contrasts may be given though the differences between pairs must always be easily distinguishable. The activity may be further complicated and the joy of the game for the older children enhanced by unexpected changes from quick to slow music or from loud to very soft chords. Squeals of delight frequently accompany such variations.

Interpretations of music, other than simple recognition of rhythm, are of minor importance in the nursery school. The children will enter heartily into an interpretation supplied by the teacher, though they seldom devise any original interpretations themselves. Let the teacher suggest that the music sounds to her like horses galloping or like bunnies hopping or like dolls jumping, and the room will promptly be filled with joyous individual depictions of the animal and activity named. Sometimes children accustomed to this kind of expression will suggest some activity which they desire to portray and then the teacher has the task of providing appropriate music.

In general, it is better not to teach specific responses such as skipping or marching to the youngest children. The interests of the teacher conducting the group should be centered on getting each child to enter into the group activity and on helping him to enjoy it. After this, she may work for individual expression based upon listening and the selection of activity appropriate to mood and rhythm.

The band. When the nursery school children are allowed to use musical instruments the resulting confusion is usually called "the band." This band, which among older children may provide a mode of true self-expression, in the nursery school amounts to little more than a source of joy and a means for learning to keep time to a rhythm. For any group of young children, the band must be limited, as we

have suggested in an earlier chapter, to such percussion instruments as sticks, bells, triangles, and drums. From the point of view of music, the band teaches the child to keep time, to follow quick music and after more practice to follow slow music and to distinguish between other extremes already cited. The band also offers opportunity for considerable social training. It brings many opportunities for choosing and taking turns since there are seldom enough instruments of one kind to supply every child. It necessitates considerable self-control since the children must learn to start and stop playing with the piano. With the older children it is possible to give some notion of teamwork by having all the bells play first, then all the drums and so on.

Singing. With the younger school children the aims of group singing must be limited almost entirely to joy in the activity, to willingness to join in the group activity and to attempting to follow the accompaniment. The older children begin to get some sense of tune and some ability to discriminate between tones. The children may gradually be made familiar with a goodly number of appropriate and interesting songs. They give evidence of enjoying hearing the songs as sung by themselves and the others, and at intervals during the day they will be heard humming or singing the songs learned in an earlier music period.

The teaching of songs to the young child is a comparatively simple matter. The presentation of a new song will be simplified if the children are already somewhat familiar with the melody through hearing it played or sung at odd times by the teacher. A few repetitions at scattered intervals will make the song fairly familiar. On these occasions the whole song should be presented artistically and as a unit. Usually some child will remark that they might sing it with the teacher or, if not, a simple suggestion on the teacher's part will often be enough to start the first attempt.

A French lullaby had been frequently sung to a group of older nursery school children for one of the periods of quiet listening. Suddenly one day, much to the surprise of the teacher, a four-year-old girl called out "We want to sing it, too" and almost every child in the group entered whole-heartedly into the reproduction. They had absorbed the melody, the rhythm and even most of the unintelligible French words.

With some of the older and more able children, it may be distinctly worth while to give some practice in individual singing and some little work in tone matching. Any such practice should, of course, be entirely voluntary. As a sort of game the piano may play "ding, dong, ding" the song of the church bell and particular children be allowed to echo back "ding, dong, ding." Or the teacher may sing some such refrain as the "meow, meow" in the song of the "Three Little Kittens" and be answered by the same "meow, meow" sung by the children.

Musical appreciation. The basis of all forms of musical expression lies in listening to the music. For want of a better term, some call this listening "musical appreciation." The presentation of music to which the children may listen may come at any time during the school day. It may alternate during the music period with active interpretation. It may be used for occupying the children when they are waiting for luncheon or waiting to go home. It has even been used in some schools during the morning rest period or the rest period just before the lunch hour. Such music may be presented simply to make familiar certain bits of well-known classical music. Children soon learn to recognize favorite selections and call for them by name. The lullaby type of music may be used for its quieting and relaxing effect. Other music may be used for the pure enjoyment of the melody. Children quickly learn the sounds

of different instruments such as the bell or trumpet or violin and can pick out certain phrases that tell parts of a story. It is well to have different types of music for appreciation.

Musical games. Still another activity which may enter into the music period is participation in musical games. As a rule organized games have no place in the nursery school. Even the child of four is not yet ready for anything involving a high degree of cooperation. Occasionally some child will ask to play one of the games he has learned elsewhere from other children but most of these are too complicated and involve too much memorization and control to interest the nursery school group. Some of the very simple musical games are, however, appropriate for these young children. The games which involve a simple imitation of the movements of a child leader, such as "Follow the Leader" and "Polly Perkin" are very successful with a nursery school group. These games are much better with a piano accompaniment for two reasons. First, if the children try to sing while they are physically very active they may develop poor breathing habits which will carry over into other singing. The second reason for the piano accompaniment is that the children frequently get so intent upon the activity itself that they forget to sing and when the musical side of the game drops out, the chief joy of the game is lost unless the piano carries on the rhythm. Certain energetic singing games suitable for outdoor play, such as "Ring around the Rosie" and "Hippity Hop," are especially valuable on cold days when the children tend to be inactive. At such a time the singing is supplied by the teacher and the action by the children.

The language period. The organized group is employed by most schools also for language expression. Language development is, to be sure, going on all the time and probably receives its greatest incentives from contacts with other talking children during the free-play period. There are many advantages, however, in setting apart a short period in which the children listen attentively to what is said by the teacher or by other children and in which each child is at some time given an opportunity to address the group. This hour is frequently called "story hour," "conversation" or "news."

In addition to the aims of all organized groups the language hour hopes to accomplish several other purposes. The enjoyment of the child is one of the chief points to be considered in connection with any part of the program and stories and verses appeal to almost every child. Practically every child who feels at all well acquainted enjoys also the opportunity to tell the others of some experience he has had, or to show them something which he has made or has brought from home. Apart from the enjoyment provided for the child the period serves as stimulus to the development of what is probably the most vital type of self-expression, spoken language. In order to express himself well, the child must hear other people speak correctly and must have sufficient practice to give him a feeling of confidence. Not only does the period give the child joy and training, but well presented stories should broaden the child's understanding and sympathy. The child is made familiar with many classic stories and the forms of expression used in many of the old favorites.

Even more than in the case of the music period, it is necessary to keep the language group natural and informal; the reason is simple: if the children are to be encouraged to talk and to offer items of interest to the group discussion, they must feel at home. Attendance should be voluntary if possible, never forced. Without making the point seem at all strained, the teacher who is alert for slips of

pronunciation and evidence of paucity of vocabulary to express ideas may accomplish much at this time in improving the child's pronunciation and enriching his vocabulary.

The subject matter for a conversation period will vary from day to day following the interests and activities of the nursery school. It may center around some object in the school situation such as a new toy or picture book. In such a discussion the two-year-olds can be expected to do little more than name the animals or objects in the picture or repeat the sounds made by the different animals. Older children will be ready to tell a story about the picture or relate some experience suggested by something told or shown. The conversation may center about some object ("news" or "treasure") which a child exhibits to the group. This may be something made at school or something brought from home. If things made at school are displayed, the child's standard of performance may be raised by hearing the comments of the teacher and the other children on his efforts. When a child is chosen as exhibitor he usually brings his "news" to a place where it can be seen by all. He is encouraged to tell the others where he got it, what he can do with it and any other points of interest concerning the object. The youngest children are frequently unable to do more than exhibit an article, but they take great satisfaction in doing this. The teacher may then conduct a discussion of the article with the older children in the group who may be relied upon to furnish interesting bits of information on almost any article shown.

A higher development of the conversation period may be offered by having the "news" consist not in an object held before the others, but in the narration of something which the child has done. This type of language period is considerably more difficult to conduct. Without an object as a definite center of interest, the attention of the young chil-

dren is held but loosely by the halting recital of their mates. After a little practice some of the older children acquire considerable skill in this sort of conversation and most of them are able to make a few simple statements.

Occasionally the conversation period may be centered in the discussion of some situation which has arisen in the school. The teacher may feel the need of education in such matters as careless spilling of sand on the playground, the necessity for taking turns at the slide and for handling books carefully. Used thus, the language period may raise the standards of the school and may give the children a closer personal interest in the rules of the school. Such discussion is usually beyond the grasp of the younger nursery school children and should be used with them only when objective demonstration is at hand.

When the language period is to be used for the presentation of literature, or as a "filler" when the group is waiting for lunch or for time to go home, rimes and verses are frequently selected as material. Well chosen nursery rimes of the Mother Goose variety have real literary value and make a universal appeal to children, as is attested by the frequency with which the children repeat them spontaneously during the free-play time. Such verses seem to be liked because they are very short, are usually dramatic, express considerable action, and have a definite rime and rhythm.

The verse is usually presented by the teacher, and the children soon join in the refrain. As in the case of songs they soon learn the words and love to repeat them alone or in unison. If the children tend to be inattentive further interest may be added by showing pictures which illustrate the verses or by dramatizing the action with appropriate finger movements. Such finger plays are one of the simplest forms of dramatization and many good ones are available.

These help hold the child's attention by keeping him quiet physically and also give him the feeling of entering into group activity. Further dramatization of such rimes as "Little Miss Muffett" and "Humpty Dumpty" may be supplied by a little ingenuity on the part of the teacher. Children of three or four seldom see anything incongruous in having Humpty Dumpty represented by six children at the same time while "all the king's horses" are only another half-dozen.

It is impossible to cover in a small space at all completely the question of what stories should be given to children and how they should be presented. For a more adequate treatment, the reader is referred to the books listed in the section on play materials. The three varieties of story commonly used in the nursery school are those told by the children, those told to the children, and those read to the children. We have already made some mention of those told by the children.

Stories read to the children are seldom desirable in the nursery school situation. In some cases with the older children where the story requires the exact words for effectiveness, or where the story follows the pictures exactly, it is permissible to read to the group. The read story should be familiar and the teller not too closely tied down to the printed page. The told story, however, is usually more suitable since it is more vivid and more easily holds the attention of the children.

In the matter of selection of stories to tell, we have no experimental evidence as to what material is suitable, and practices vary greatly from one school to another. There are certain considerations, however, which experience has taught are important. A story narrated to a group must be much more carefully selected than one which is to be told to an individual child. It should contain nothing at

all frightening. It is seldom possible to know all the members of the group so well that the narrator can risk any story of which she has the slightest doubt and stories which may be perfectly suitable for one group may be undesirable for use with another. The teller must consider the age, maturity and experience of the children in the group. Children who have never seen an ocean, a lake or a river will not understand any except the very simplest stories of boats. The child whose experience is limited to the farm may easily be confused by some story which falls within the daily experience of the city child, while the city child may fail to understand another story because he thought that a silo was an animal or that a cow had no existence beyond the picture on a can of condensed milk. A group which happens to be intensely interested in mechanics may fail to respond to a story of woods and flowers in the spring, while a group wrapped up in doll play may remain unmoved by a story of a train. The selection of a story may well be influenced by the season of the year. All children are interested in Christmas, Easter and Fourth of July, to say nothing of the first snowfall or the first robin.

The story which is selected should be one which the teacher herself enjoys. It is very difficult, almost impossible, for a person to give joy with a story which she herself dislikes. A funny story loses all its humor when it is told by a person who sees nothing amusing in it. To be pleasing, the story must run along smoothly with no retracing of steps to correct errors. Even a well-selected story may lose its charm for the children if the teacher gets mixed in the details or the characters. New stories are often not as popular as old stories. The children delight in anticipating the next event or remark, and great is their disappointment if that is not worded just as they have heard it before. A refrain or a recurring phrase quickly

gives the new story the feeling of familiarity which seems to be one of the chief joys of the well remembered story. Even a story such as "Epaminondas," whose humor is well over the heads of the four-year-olds, may give delight through the repetition of the familiar "Law sakes, Epaminondas!"

The stories most suitable for the younger nursery school children are those built around the everyday experience of the children and named by Lucy Sprague Mitchell Here and Now Stories. These stories have, ordinarily, no set form and are usually a simple recital of familiar events. Such stories have been told by every one who has had much to do with young children and every family relates them when urged to "tell about when I went to Grandma's" or to "tell about the time you went to the circus when you were a little boy." With frequent repetition such stories may assume a set form and become a part of the literature for children. Usually, however, they are told simply for particular children on a particular occasion, never recorded and so lost. In their simplest form at home they are the mere recital of the events of the child's day in chronological order. At school, they may concern the daily activities of the individual children or of the group. Frequently a story grows up out of the recital of some unusually vivid experience. In the nursery school at the University of Minnesota, for example, the children know by heart the story of how the fire engines came and put out the fire which had started in Frederick Lane's father's garage; they can recite without a slip just how Miss Boynton went on the train to Indianapolis, just what she had for breakfast, and just what time the big clock in the station said as the train pulled out: and they can, for weeks ahead, outline the main features of the Christmas party. As the children grow older, the stories may become more complex and detailed, but even adults enjoy the telling and retelling of bits of their own experience.

Other recorded stories which are fairly close to the child's own experience are tales of other children or of familiar animals. Such stories should be selected carefully since many of them are unwholesomely sentimental and tell of animals which resemble the originals in name and appearance only. Talking animals constitute a feature which, while far from the truth, adds so much to the vividness and the enjoyment of the story, that it is in itself no sufficient cause for discarding the story. Indeed, it is probably far better to have the animals express simple ideas in simple language than to attribute to them, as some of the books for older children do, the whole gamut of involved human emotions which the animal is allowed to evidence in a "sad expression" or a "wagging tail." As long as the animal is essentially natural in the story he is an addition. Such stories as "Mrs. Tabby Grey," "The Kitten Who Forgot to Talk," "Peter Rabbit," "Little Black Sambo," and "Johnny Crow's Garden" are sources of great joy and not too inaccurate information.

Farther from the child's experience are the folk tales of unknown origin which have been handed down by word of mouth and put into written form at a comparatively late date. Most of these tales are entirely unsuitable for young children. They are too mature in their ideas and frequently contain an element of horror. Their humor, all too often, is a type which is entirely unintelligible to the children. A few of the better versions of some of these old tales, nevertheless, are enjoyed by the older nursery school children. The value of these stories lies in their literary form, their simple language, direct speech, amount of action, lack of description, and their repetitive refrain and cumulative effect. Such stories may be used as "The Old Woman"

and the Sixpence," "The Three Pigs," "The Gingerbread Man," and "The Three Bears."

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CHAPTER VI

HABITS OF CLEANLINESS AND ORDER

THE young child seems to have no natural repugnance to dirt. Even if he feels more comfortable when clean, the added comfort seldom equals the effort required to put himself in that condition. He may prefer to play in a room in which his toys are arranged tidily and in their proper places, but he would rather play in a confused snarl than clear up the room. He should be learning at this early age that toys which are left on the floor may be stepped on and broken or may be in the way of somebody else. He should also learn that toys which are not returned to their proper place are hard to find the next time he wants them.

The child should also be taught that clean bodies, clean hands, faces, noses, mouths and teeth are desirable because they reduce the chance of spread of infectious disease and because the person who is clean is more acceptable to other people. From his own experience with a little guidance from his elders, the child will learn that dirty fingers result in dirty smudges on precious belongings, that sticky fingers make accurate movements difficult, and that sand and dirt on the hands at meal time are likely to get into the mouth and interfere with the enjoyment of the food. The child of this age should be encouraged to continue, or to adopt if he has not already acquired, a matter-of-fact attitude toward the processes of elimination, and to assume that once control of the processes is acquired, they may be practically ignored.

Experimental data. A survey of the literature reveals no scientific studies of the acquisition of habits of neatness and general cleanliness, and but few on the acquisition of bowel and bladder control.

Hull and Hull published a record of the learning curve of an infant in acquiring bladder control. The records cover the period beginning with the fortieth week of life and continuing through the hundred and twenty-seventh week. Their results, briefly summarized, state that at the age of twelve months 62 per cent of the daily urinations were made when the child was placed upon the toilet; at the age of eighteen months this percentage had risen to 84; at the age of two years to 88 per cent; and when for weeks 124 through 127 (approximately two and a half years) the percentages rose to 99, the child was considered "trained." The plateau in the curve found for the latter part of the second year coincided with the early beginnings of spoken language.

Data on toilet accidents was collected by the nursery school in the Institute of Child Welfare at the University of Minnesota during a period of twenty-six consecutive school days beginning with November 19, 1928. The total attendance during this time was 631 or a mean daily attendance of 24.3 children. During the period there were no accidental bowel movements at all. The total number of accidental urinations during the day were 9, or 1.4 per cent; the total number of beds wet at nap time was 8, or 1.3 per cent of the total number of cases. The mean chronological age of children in the school was 3 years 8 months. The mean chronological age for children having toilet accidents was 3 years 1 month for accidents when awake, and 3 years and 5 months for accidents at nap time. Of the 26 days, there were 19 when there was no accident during the waking hours, another 20 when there was no accident at nap time, and 15 days when there was no toilet accident

at any time. The waking-time accidents were confined to seven children, the nap accidents to three. Three children appeared in the records as having accidents at both times.

In connection with a study of sleeping habits, the Institute of Child Welfare collected data on bed-wetting on 544 children between the ages of two and four for one week in the month of April, 1928. Their results are summarized as follows:

	AGE 2		AGE 3		Age 4	
	Boys	Girls	Boys	Girls	Boys	Girls
Mean number of naps taken per week	6.1	6.0	5.0	4.0	2.5	3.4
	.73	.52	.09	.05	.03	.00
	77.6	73.2	91.5	96.7	96.8	100.0

Aids to habits of orderliness. In attempting to establish any habit in young children the teacher must set a good example; she has no right to expect the children to live up to standards which she herself ignores. The procedure will be much simpler if the teacher uses foresight in smoothing the way for the acquisition of the habit. Thus in teaching the children to help keep the nursery rooms neat, she must first plan the equipment and the routine so as to make it possible and easy for the children to care for the room. For this purpose receptacles and convenient storage space should be provided so that it is easy for the child to put his toys away after they have been used. Some materials, such as the wooden trains, may be kept on low open shelves. Blocks may be dropped into halfbushel baskets, for the child of nursery school age can not yet be expected to pack blocks neatly into boxes or chests. A container on wheels or castors simplifies the task of picking up. Sand toys may have a basket of their own kept under or near the sand box. Small material like beads, and pegs should be kept in boxes which are easily carried but which are at the same time large enough to allow the child to remove single pegs or beads easily. Shallow boxes of the type of cigar boxes are satisfactory. Convenient wastebaskets encourage the gathering of scraps from the floor. Material that is easily spilled such as paints or paste is usually kept out of reach and used only under supervision. In addition to providing places where material may be stored easily, the school needs within easy reach equipment for cleaning up: brushes, dustpans, and cloths of various kinds. A further aid to habits of neatness is the allowance in the program for a definite cleaning-up time following the play or work period. Clearing up is not nearly so tedious a process if it is accepted as part of the daily program or if many others are similarly occupied.

Standards of cleanliness. After the school has provided the means for keeping the rooms neat and clean, it may go on to make regulations that encourage neatness. Sometimes the responsibility for carrying out rules rests not on the individual alone but on a group, as when several children have been building blocks together.

In most nursery schools each child is expected to put his playthings away before he chooses some other occupation. This rule cannot be enforced too rigidly, for sometimes a child is called away from his play or leaves temporarily in the expectation of returning, but it does prevent the widespread scattering of materials and simplifies the cleaning-up period. Children will come to understand the rule if they are reminded over and over again that "after we are through with toys we put them away." The younger and more dependent children will need considerable help but they may be expected gradually to assume the responsibility themselves. A second rule which is enforced at most nursery schools is that sand, clay, scraps of paper, etc., which have been spilt on the floor must be swept up. Some schools expect the child to sweep the débris into a dustpan and then empty it into some waste receptacle. Other schools consider the satisfactory manipulation of a dustpan too difficult for the younger children and so limit the requirements to sweeping it under the table. For sanitary reasons sand which has been on the floor should never be replaced in the box. A third responsibility which may be expected from the children is wiping up the floor or the table when any liquid has been spilt. Cloths for different purposes should be kept in different places so that the children will have no difficulty in distinguishing one from another.

Care of clothing. A little foresight on the part of the nursery school teachers will make it much easier for the child to be neat about his personal possessions. Disposition of outside garments is much simplified by the provision of a locker for each child. The lockers should accommodate coats and hats which can be hung from a hook and also such articles as sweaters and rubbers which are more easily held on a shelf or in a basket. A clothes bag to be hung in the childs' locker is a convenient storage place for the young child's change of clothing. The lockers should be marked in a way which is clear to both child and adult. For the sake of teachers each locker should be labeled with the child's name, but since most nursery school children are too young to recognize their own names, locker tags or markers with distinctive colors and designs may be provided as well. A green frog may designate John's locker, his toothbrush and his face cloth, while Mary's possessions

are tagged with a red elephant. However the lockers are marked, they should be within easy reach of the child. The child will learn to keep his clothing in good order more quickly if the number of pieces is reduced to a minimum, if the material is one which will stand ordinary wear and strain, if the design of the clothing is one which permits free movement and active play, and if aprons are available for activities which are usually dirty, such as painting, clay work, and washing dishes. Some schools provide rubber aprons to keep clothes dry while hands are being washed. Mittens, rubbers, scarves, and handkerchiefs should be marked plainly with the child's name. The child himself is seldom particularly interested in his own clothing and it is too much to expect the nursery school teachers to remember the ownership of each individual item.

Clothes should not be a matter of paramount importance to the nursery school child. He may be expected to hang up his outer wraps when he has removed them, and he may be expected to take reasonable care of his other clothes. He should avoid unnecessary soiling by taking care not to spill food, by wiping his hands on the towel instead of on his clothing and by trying to keep the water from splashing on his clothes when he is washing his hands. He may be expected to keep from tearing his clothing unnecessarily. If his clothing gets caught on anything, he should learn to stand still until it can be disentangled. If a small hole develops in his stocking, he may be taught to deny himself the joy of enlarging that hole with his fingers.

Hair-combing. The child of nursery school age may also be learning that tidy hair is essential for personal neatness. The child himself can do little except learn to consider hair-combing part of the regular toilet routine, acquire some little skill in handling comb or brush, and learn to

use only his own comb and never those of his neighbors. Each comb should, of course, be marked and may be kept within reach of the child, hung on a hook near his wash cloth or placed on a convenient shelf. The confusing of combs should be prevented if possible but it is not as serious as in the case of toothbrushes. Theoretically hair-brushing or combing should follow the nap, but the exact scheduling in any school will be determined by the particular routine of that school. In many schools it is more convenient to have the hairdressing make up part of the general cleaning up for lunch.

Use of handkerchiefs. More important than neatness of person is cleanliness of person and in many ways the nursery school may be an important factor in teaching the child the fundamentals of personal hygiene. One of the most important of these points is teaching the proper use of handkerchiefs. Each child should be expected to bring a handkerchief from home every day. Handkerchiefs, however, are easily lost or mislaid. It is hopeless for the child to try to keep track of a handkerchief unless he has a pocket or unless the handkerchief is fastened on in some way. Some mothers merely pin the handkerchief to the front of the clothing. This is, of course, very unsightly and frequently the handkerchief gets in the way when the child stoops over. To prevent this, the handkerchief may be pinned by the corner inside the pocket and the child taught to return it to the pocket after use. Another method of attachment is to sew one end of a tape to the corner of the handkerchief and pin the other end to the child's costume. Here again the handkerchief may be kept in the pocket and still be permanently attached, but all too often the tape is too long or is pinned in the wrong place and the handkerchief drags on the floor and gets stepped on. No matter what precautions are taken, there will always be

a demand for emergency handkerchiefs in the nursery school. Some schools keep a box where lost handkerchiefs are returned after laundering. This may act as an actual incentive to the children to ask for a handkerchief when one is needed, for they enjoy hunting through the box for one of their own or one which strikes their fancy. Many schools provide paper handkerchiefs for emergency use, and if a style is selected which is convenient in size and made of soft absorbent paper, they may be very satisfactory. Such handkerchiefs are usually kept within easy reach of the children and near a wastebasket into which they are to be dropped after use. If these paper handkerchiefs are stored in a box they may be hard for the child to separate. They may be hung from a nail after the manner of sheet toilet paper.

The children may be impressed with a number of points about the use of handkerchiefs. They should learn to ask for or to get a handkerchief when they need one and have lost their own. They should learn never to use another child's handkerchief and not to use a handkerchief which has fallen on the floor until it has been laundered. Many of the older children learn where the laundry bag or basket for stray handkerchiefs is and drop them there of their own accord. Some of the younger children may actually have to be taught how to hold a handkerchief for themselves and how to blow the nose.

Tooth-brushing. Like hair-combing, tooth-brushing is an activity which some nursery schools consider outside their field, but since it is one of the fundamental hygienic habits, it seems only logical to teach the child to think of it as part of the regular cleaning-up process. The toothbrushes should be good ones clearly marked with the children's names. This may be done by scratching the finish off part of the handle and printing the name with India ink. At

times, excellent toothbrushes may be obtained at small cost through some local dental clinic. Sometimes the expense is borne by the school, sometimes by the parents. Each child's brush should be hung in a clean, sunny place out of the child's reach and far enough away from other brushes to prevent contact between the bristles of neighboring brushes. If the brushes are kept within the reach of the children, mix-ups are almost certain to occur. If toothpaste is used, it should be kept out of reach and used only under supervision. If it is within the reach of the child it is much too apt to be a very tempting weapon or a substitute for mucilage, or paint. From the point of view of dental hygiene the best time for tooth-brushing is immediately after lunch but many schools find that their program runs more smoothly if it is included as part of the general cleaning-up period.

The children may be expected to get into the habit of using a toothbrush. In addition they should learn to consider tooth-brushing as part of keeping the body clean, never to use another's brush, never to use a toothbrush for any purpose other than brushing teeth, and never to use it to smear mirrors, to investigate the inner working of faucets, or to scrub floors. Besides respect for the toothbrush the child may, perhaps, learn something of the proper method of using it, brushing instead of biting and sucking.

Face-washing. In most nursery schools the children wash their faces at some time during the day. This activity is usually assigned to the cleaning-up period before lunch but it may be part of the process of getting clean again after lunch. Once more the child cannot be expected to do a good job, but he should learn to consider face-washing as part of the general toilet routine. He should also acquire some skill in handling the wet face cloth and in squeezing out the water when the washing is done. As in the case

of combs and toothbrushes, he is taught to use only his own cloth.

Hand-washing. Washing of hands goes on intermittently throughout the nursery school day, but there are certain times when it is definitely on the schedule. All schools expect the children to wash their hands before meals and after going to the toilet. In addition to these periods there are the occasions when the hands have become especially dirty, perhaps from playing out-of-doors or perhaps from using clay, sand or paints.

In the attempt to make hand-washing easy for the child, the school should have the washbowls within easy reach, either set low or provided with a box or bench upon which the child may stand. The temperature of the water should be regulated to prevent the child from getting unpleasant impressions of burning or chilling. The towels should be within easy reach and should be very soft and absorbent. The teacher will have to be responsible for turning back hanging cuffs and long sleeves if the washing is not to be followed by the discomfort of damp cloth about the wrists

There are certain advantages in having a stopper in the washbowl. The hands washed thus get a short soaking and so get cleaner. A supervising teacher will be needed to see that the water is turned off before the bowl is too full and to make sure that the water is the correct temperature. The use of a stopper necessitates washing out the bowl after it has been used. Many mothers prefer to have their children wash their hands under running water, particularly when they are away from home. Undoubtedly this is the method which is freest from chances of infection from the bowl. It is, however, a difficult method to use in the winter in places where the cold water is very cold and the warm water very hot. Even with a faucet which



FIG. 7.—A WADING POOL PROVIDES HEALTHFUL PLAY FOR WARM DAYS.



FIG. 8.—HOW FIXTURES HELP THE CHILD TO BE INDEPENDENT IN WASHING.

mixes the two, the temperature of the water will be uncertain and variable.

From this part of the toilet procedure in the nursery school the child may be expected to learn that hands should always be washed before meals and after going to the toilet. He should learn to know when his hands need to be washed at other times. More than this, he may be expected to acquire some of the mechanics of washing and wiping his hands and such details as making sure that his sleeves are out of the way, that his hands are really clean, and that the soap is not left to soak in the water.

Baths. In the social service type of nursery school baths may be a part of the daily routine but in most schools they are necessary only occasionally. In case of a sudden attack of vomiting or an accidental bowel movement in the clothing, the teacher will need to give the child a complete bath. For such an emergency a shower bath is ordinarily sufficient, though some schools are equipped with a small bathtub raised to a height which is convenient for the teacher.

Bowel control. Practically never does a nursery school staff have to train a child for bowel control. Even in a child of eighteen months the training has usually been long established. In the nursery school at the University of Minnesota the writers found a child who according to the mother had "never had but one bowel movement on the toilet in his life, and she was always thankful when he soiled his clothes early in the morning because it seemed too bad for the teachers to have to clean him up." According to her report she had "spanked him," and "threatened him" and "put him to bed" but nothing had any effect. The nursery school teachers, with her permission, undertook the training of the child. He was then two and a half years old. The first step was to work out a schedule

so that he would be taken to the toilet at the same time every morning. Within a few days the teachers discovered that the child was apparently ashamed of having a bowel movement, at least he ran off and hid when his bowels were about to move, and that somehow he must be given the opportunity for praise for good performance. His language development was rather poor and his attention very flighty so that all verbal instruction seemed to pass by unheeded. The teacher in charge tried a glycerine suppository, but it had absolutely no effect during the succeeding hour. Next day a very large soap stick, held in place until the child made definite efforts to push it out, resulted in a bowel movement some fifteen or twenty minutes later. The child then received all the praise and congratulations within the power of the teacher. He took evident satisfaction in her commendation. Next day at the same time he was taken to the toilet and shown the soap stick. He was not pleased at the prospect, but in spite of hard effort was unable to move his bowels until after the soap stick had been inserted. On the day following he once more objected to the soap stick and was told that if he could move his bowels himself the soap stick would not be used. After an interval of some twenty minutes the child had a bowel movement without assistance. During the next few days the boy had some accidental bowel movements but on most days he succeeded in moving his bowels when on the toilet at the regular time, and after the ninth day the school had no more difficulty. The mother had been kept informed of the child's progress and used the same hours at home during the week-end.

Such incidents as the one just cited are very rare but they go to show that the nursery school teacher may be successful where the mother has failed. Other responsibilities in regard to bowel movements rest on every school.

The school should know the child's ordinary schedule for howel movements and should be able to assume that a particular child has had a bowel movement in the morning before coming to school, or at what time a movement may be expected during the school day. Since regularity is of great importance in keeping the bowels in good working order, the child should be encouraged to go to the toilet at the same hour each day. If a bowel movement is to be expected at school, the child must be given plenty of time in a toilet room which is comparatively free from distractions. The mother should be notified every night of the occurrence of a bowel movement during the day and the amount and consistency of the movement, and especially informed of constipation or a bloody stool. Schools using some distinctive color for the notes about bowel movements find sometimes that the note not only fulfills its original mission of keeping the mother informed, but may also work as a reward and stimulate the child to greater effort or longer waiting for the sake of getting the "blue slip" or the "pink note."

Bladder control. The problems connected with urination require a good deal of the nursery school teacher's time. The attitudes of various schools vary from one which refuses to admit any child not completely trained to the school which believes that too much attention is focused on the dry habit. Harriet M. Johnson in Children in the Nursery School says:

I believe that too much emphasis has been laid upon the importance of acquiring early control of urination and other habits of self help. . . . We have in mind . . . putting a minimum of emphasis upon the habits concerned with elimination, at the same time endeavoring to get each child's "rhythm," i.e., the periods between voiding, so that he can be taken to the toilet and thus remain dry. We are still raising interrogations as to the

Co.), pp. 29-31.

importance of even this amount of supervision, that is, if being kept dry has any effect upon the establishment of bladder control... We believe that it will be established as soon if we do not call the need of it to the child's attention as it will if we do, and that the reduction of the subject from its usual place of paramount importance in the lives of adults and children gives room for interests which are distinctly of greater educational value.

Whatever the attitude of the school toward training in bladder control, many toilet accidents will occur when a group of two-year-old children are together. One precaution which simplifies the problem at such times is the storage of extra clothing in the locker of each of the younger children.

The teachers must bear in mind the times when toilet accidents are most likely to occur. Frequently the excitement attendant upon first coming to school will be enough to upset a nervous child's control. Other times when children are apt to wet themselves are: during naps, when coming into warm rooms from a cold outdoors, when under some emotional strain and when coming down with a cold or other illness.

In order to be most helpful to the child, the nursery school should be informed about the home routine, should know, for example, the usual time interval between urinations, the child's terminology, and whether or not the boys are accustomed to standing for urination. Some schools make standing a rule for the boys; others follow the practice of the individual home. The school should also arrange to have a teacher in the toilet room whenever there is any child there. Many times this teacher will be called upon to assist in fastening or unfastening clothing. She may prevent much wetting of clothing by making sure that 'H. M. Johnson, Children in the Nursery School (The John Day

it is held out sufficiently when the child is on the toilet. Above all she will be ready to answer questions and to redirect the undesirable conversations which sometimes get started in the toilet room.

From the routine of the nursery school, the child should acquire or should continue if he has already acquired a matter-of-fact attitude toward the processes of elimination. He should learn to go to the toilet at stated times during the day, particularly before and after the naps. He should gradually gain the ability to state his need. With the youngest children the responsibility rests with the teacher, but the older children can assume almost complete control. The child should also be learning to button and unbutton his own clothing, to use toilet paper correctly, to flush the toilet and to wash his hands after leaving the toilet.

Confirmed cases of enuresis will not appear in the nurserv school since we are dealing with children still in the stage of being trained. The school will, however, find many cases where the training has been poor and where the mother may ask for suggestions toward speeding the training. In the home, as in the school, a regular routine is the most important factor in toilet training. This routine must be assumed by the teacher and no child allowed to depart from it at the specified times. Shortly after the addition of a new assistant to the staff of one nursery school the number of accidental urinations in the afternoon suddenly increased. Investigations showed that this assistant was assigned the task of steering each child coming out from the sleeping room to the toilet. Her method of sending the child to the toilet consisted of asking in a pleasant tone "Do you want to go to the toilet?" More and more often came the answer "No." She asked again "Are you sure you don't want to go to the toilet?" and was answered more loudly "No!" Further urging on her part resulted in such violent refusals that she accepted the child's word and allowed him to proceed to the play room—to be wet a half hour later. Other suggestions which the mother may find in the nursery school procedure lie in the absence of any punishment for accidental urination, in the general avoidance of any unpleasant connection with processes of elimination, in the immediate changing from wet to dry clothes after an accident, and in the promptness with which children who are apt to wet the bed during naps are taken to the toilet upon awakening.

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CHAPTER VII

FOOD IN THE NURSERY SCHOOL

THE child, like the adult, needs food for energy, for the building of tissue and for regulating body processes, but the child needs proportionally more food than the adult because he must not only replace tissue which has been worn down, but must also build the additional tissue required for growth. The food consumed by the child is used first for energy or activity and then what is left over for growth. Thus with a limited diet the child may continue to be active though he may remain definitely undersized.

The total daily intake of calories by the child between the ages of two and four should be about 1,000 to 1,500. These calories should be distributed roughly as follows: 10 per cent to 15 per cent from proteins; 20 per cent to 30 per cent from fats; 10 per cent to 15 per cent from vegetables and fruits; and 40 per cent to 50 per cent from carbohydrates.

The parts played by the different forms of food may be briefly summarized. Proteins are necessary for growth and maintenance of tissue and therefore children need a proportionally greater amount of protein than do adults. The most valuable protein foods are: milk, meat, eggs, fish and cheese. The fats are especially important during growth. Fats are carriers of vitamin A and lack of fat increases susceptibility to certain diseases. The most valuable fats are: milk fat, egg yolk, and certain animal organs

such as the liver and kidney. Carbohydrates serve mainly as a source of energy and supply necessary calories not furnished by fat and protein. Without the addition of carbohydrates to the diet, it is probable that complete metabolism of fat is impossible. The carbohydrates are the most economical food. They cost but little and they are almost completely utilized by the body. They are mild in flavor and can be eaten for a long time without becoming tiresome, and they lend themselves to a great variety of combinations with other foods or food materials. The most common carbohydrates are: bread, sugar, cereals, potatoes, and other vegetables. Mineral salts, while not sources of energy, are indispensable to growth and normal nutrition. They are necessary for the physiological functions of secretion, excretion, circulation, digestion, and osmosis. They also promote growth of the skeleton. Phosphorus and most of the other salts are abundantly supplied in all foods, but frequently the diet lacks iron and calcium. Iron is found most abundantly in fruit juice, beef juice, eggs and spinach; calcium in milk, eggs, and vegetables, especially green vegetables.

The first four vitamins are of especial importance for the preschool child. Vitamin A is necessary for growth and protects against disease, especially of the respiratory tract. This vitamin is found in milk, butter fat, egg yolk, cod-liver oil, green leafy vegetables, and carrots. Vitamin B is necessary for growth, for appetite and proper digestion and protects against beriberi. It is found in milk, eggs, fresh fruits and vegetables. Vitamin C protects against scurvy and probably against dental caries. This vitamin is found in raw fruits, especially oranges, lemons, and grapefruit, and in tomatoes, raw vegetables and raw milk. Vitamin D has an effect similar to that of sunlight and protects against rickets and probably dental caries. It is found

in cod-liver oil, egg yolk from hens running out-of-doors in sunlight, and butter from cows fed in fresh pasture. Water is an important constituent of the body which must be constantly replaced. It is also a carrier of food to the tissues and of waste away from them.

Experimental data. A number of studies have been made on the eating habits of preschool children. One of the most striking was that included in an investigation of the conditions of 6,015 preschool children in Gary, Indiana. The children were located by a house to house canvass and in one interview the mother was asked to state exactly what her child had had to eat on the preceding day (unless that day had been Sunday or a holiday). Some rather amazing results were obtained in this study. It was found that only about 19 per cent of the children were receiving as much as a pint of milk a day, and more than half the children had no milk at all on the day reported. Sixteen per cent had a diet for the day which contained no milk, not even cooked in other foods. More than half of the children had no vegetables other than potatoes, and nearly twothirds had no fruit of any kind. Potatoes were in many cases the one redeeming feature in an otherwise totally deficient diet. More than half of the children were without eggs, while meat appeared frequently even in the poorest kind of diet. Two-thirds of the children had meat at least once on the day reported and about 19 per cent had it more than once. Only about 3 per cent of the diets bore evidence that they were planned with the age of the child in mind. Very few had evening meals which were suitably simple and about a third of the children had no breakfasts or breakfasts of extremely inadequate type, The poorest conditions were found in the homes where the parents were foreign born.

Clayton studied the food of a group of twelve nursery

school children at home and found that they were receiving less than the optimum amounts of calcium and iron.

Stolz gives data on what food was left on the plates in the nursery school at the Institute of Child Welfare at Berkeley. Since he fails to give the number of times which each of the foods was offered to the children, his list of disliked foods cannot be used statistically. Of interest, however, are the factors which he considers responsible for improvement in eating habits: food planned by nutrition expert, well prepared and served, portions not large, second helpings encouraged; vigorous activity during the morning to produce hunger; short relaxation period immediately before lunch to reduce nervous tension; appropriate tables and chairs for children; atmosphere of quiet enjoyment during the meal; use of suggestion and praise, avoidance of implication of moral delinquency, and use of certain privileges as rewards for good eating habits.

Brooks studied, among other topics, the frequency with which various foods were served to preschool children (30 cases). Raw fruits, arranged in order from most frequent to least frequent were: oranges, apples, "combinations of fruits," grapefruit, dates, bananas, raisins, grapes, watermelon, figs and prunes. The order of frequency of service of cooked fruits was: apples, peaches, prunes, cranberries, apricots, cherries and pears, pineapple, figs and plums, raisins, blackberries and dates. Raw vegetables in order of frequency of service were: lettuce, cabbage, celery, carrots, tomatoes, onions, and radishes. Cooked vegetables arranged in similar order were: potatoes, tomatoes, carrots, peas, string beans, spinach, "combinations of vegetables," cabbage, corn, celery, onions, beets, turnips, cauliflower, squash, asparagus and parsnips. Brussels sprouts and eggplant. Of the cooked cereals oatmeal was used to

a greater extent than any other. Twenty-nine of the thirty children received one high protein food other than milk each day. Cakes and cookies were more common than any other dessert.

Langford studied the eating habits of 72 preschool children and found that about 85 per cent began to eat at once, while 11 per cent had to be reminded and 4 per cent to be urged. She found that 30 per cent of the one-year-olds; 87 per cent of the two-year-olds; 94 per cent of the three-year-olds; 99 per cent of the four-year-olds; and 100 per cent of the five-year-olds fed themselves altogether. Appetite seemed to fall off a little with increasing age, but the figures vary considerably: 72 per cent of age 1, 68 per cent age 2, 75 per cent age 3, 60 per cent age 4, and 63 per cent age 5 were said to have good appetites.

When a child enters the nursery school at the University of Minnesota, the mother is asked to state for each of thirty-one foods whether it is "liked." "disliked but eaten," "refused" or "never offered" to her child. When 115 of these blanks, divided approximately equally between ages two, three, and four, were summarized a number of facts stood out. There was no record of a child refusing oranges, butter, bread or cake and very few cases where these foods were said to be disliked. Other foods which were refused less than 10 per cent of the time were: milk, eggs, meat, fish, fruits other than oranges, cooked fruits, cereals, rice, desserts, and ice cream. In all the records there was no child who was not offered potatoes, carrots and peas. The vegetables which are clearly liked more than the average are: potatoes, carrots, peas, beans, celery, beets, lettuce, and tomatoes. The vegetables which show more than the average number of records as "disliked but eaten" are: carrots, spinach, onion, cauliflower, asparagus, beets, squash, and lettuce. The vegetables which

are refused more often than average are: onion, cauliflower, cabbage, squash, and turnip. The vegetables which are most frequently reported as "never offered" are: onion, cabbage, squash, turnip, and Brussels sprouts. From this study it appears that carrots, beets and lettuce seem to be either definitely liked or definitely disliked. Onion, cauliflower and squash are apparently the least popular vegetables, with cabbage and turnip taking second place.

Dunshee studied 3,005 records of nursery school lunches. Here the mean number of calories taken at the meal ranged from 351 in a boy aged two and slightly underweight to 555 in a three-and-a-half-year-old boy. A significant difference was found between the mean amount, 425 calories, eaten at age two and the mean amount, 478 calories, eaten at age four. No significant sex difference was found in amount of food eaten. The children who ate most quickly also ate the greatest amount, and the children who seemed to enjoy the food more than the others ate more. The amount eaten varied somewhat with the adult at the table. but showed no significant change with the change of season. The children in general seemed to be little affected by visitors in the room. Milk was refused less than one per cent of the times it was offered and no food was refused more than 2 or 3 per cent of the time. Protein food other than milk was refused 37 times out of 2,336 offerings; vegetables were refused 47 times out of 3,005; carbohydrates 74 out of 5,932; and desserts 116 out of 2,974 offerings. These figures are a bit misleading unless it is remembered that the vegetable was presented to the child at the beginning of the meal with the understanding that nothing further would be offered until the vegetable was eaten. With this in mind it is clear that the foods offered early in the meal are most likely to be eaten, those at the end of the meal most likely to be refused.

Food served in the school. In planning the luncheon to be served at the nursery school, the dietitian or teacher in charge will remember that a child's heaviest meal should come in the middle of the day and she will therefore expect to provide sometime during the school day for half the total intake for the twenty-four hours. In order to have a balanced diet which supplies the necessary elements, the child should be given certain foods every day. He should have at least a pint and a half of milk and he should have another protein food. This second protein should be egg, meat, fish, or cottage cheese. Pork should be avoided because it is too fat. Two other vegetables besides potato should be given. One of these should be a green vegetable and neither should be cucumber, radishes or corn. Two fruits should be included in the day's menu, both ripe and one preferably raw. Small fruits with many seeds are to be avoided. From the cereal class the child may have bread, crackers, breakfast foods, and rice. Whole cereals are more nourishing than those finely ground and brown rice is better than the polished variety. About a tablespoonful of butter should be given on the bread during the day. A little sugar may be added to some of the foods, but not enough to spoil the child's appetite. Three or four glasses of water should be drunk between meals sometime during the day.

The number of meals given to young children usually ranges from three to five and of these any, all, or none may be furnished by the nursery school. Breakfast and supper as provided by a few schools of the social service type are simple meals ordinarily including fruit, cereal or toast or both, and milk, perhaps egg or bacon. Many nursery schools serve a dinner at noon.

In addition to the noon meal, many schools provide a mid-morning and mid-afternoon lunch. The mid-morning

lunch may be fruit juice (usually orange), tomato juice, raw apple, raw lettuce, milk, or cod-liver oil (usually combined with fruit or tomato juice). The mid-afternoon lunch usually consists of milk and crackers.

The menu. The menu for the nursery school dinner at noon is usually planned to include: meat, egg or fish, milk, potato, another vegetable, bread, butter, fruit, and a simple dessert. Sample menus from three widely separated nursery schools are given below.

MENU FROM SCHOOL A

Salmon with egg sauce Lettuce sandwiches
Boiled potatoes Grape jelly

Buttered onions Milk

MENU FROM SCHOOL B

Escalloped potatoes Stewed tomatoes
Lettuce sandwich Floating Island custard
Milk

MENU FROM SCHOOL C

Roast lamb Creamed potatoes
Buttered spinach Celery sandwich
Bread pudding Milk

The order in which the courses are served varies somewhat from school to school. In some schools the meat, potato and other vegetable, sandwich and milk are served all at the same time as they would be at home. In other schools the meal may be divided into four courses: first the vegetable, then the meat and potato, then the sandwich and the milk, and last the dessert. There are some advantages in serving the vegetable first. This is the part of the meal most often disliked and should therefore be offered while the appetite is keenest. There is ordinarily little difficulty in persuading a child to eat any of the

rest of the meal and so if the child eats his vegetable, the teacher may be fairly certain that the rest of the meal will follow with little effort. In some schools almost all of the food is served together in a sort of stew. This may simplify the service and may allow certain unpalatable foods to slip by unnoticed but the concoction is so unappetizing and so far from what the child will be served elsewhere, that such an arrangement should be avoided if possible.

Seating arrangement for luncheon. The general arrangement of the children at the lunch tables will depend on the amount of space, the number of teachers available. and on whether or not teachers eat at the same time. In some schools, each child sits at a small table alone, but this is practical only for a very small group. Four or five children are all that a teacher can handle with ease, especially if she is expected to keep any sort of record. The seating arrangement should remain the same for day after day, unless the group of children at some table prove to make an undesirable combination. When all the children at a table are highly excitable they will be able to eat but little. When all the children at a table are slow eaters, they may dawdle along for an hour or more. The children at any one table therefore should represent a variety of ages and temperaments.

Luncheon service. The type of luncheon service varies with the school. In some schools the tables are set by a regular waitress, in others by teachers, and in others by some of the older children assisted when necessary by teachers. The question of who is to wait on the table is also answered in various ways. Some schools try to keep the school luncheon as nearly like the home luncheon as possible and so they provide a regular waitress who serves the children as they sit quietly at their tables. In

other schools the serving is done at the table either by the teacher or one of the children. In still other schools cafeteria service is provided with all the serving done at a side table. Here the loaded plates or trays may be carried by each child himself, or by one child who serves the entire table.

Formality at the luncheon table. The degree of formality observed at the lunch table is another item which varies greatly from one institution to another. In some schools all the children remain standing quietly until grace is repeated by a teacher or a child or all of the children in unison. In other schools each child sits in his own seat as soon as he comes into the room or goes to the serving table at once for his first dish. In some schools all the children at a table wait until every one has been served; in others, each child works as a unit, is given the second course as soon as he finishes the first, and is allowed to leave the table as soon as he has finished. There is a good deal to be said in favor of the informal luncheon hour. Children of preschool age are naturally very active and find it exceedingly difficult to sit still. Much disturbing restlessness may be avoided by giving the child the legitimate activity of carrying plates to and from the serving table. The social training carried on during the luncheon hour must naturally take a secondary place to the training in habits of eating what is offered. Some good work may be done, however, in the line of encouraging a moderate amount of conversation, refraining from talking while the mouth is full, holding spoon and fork in a correct manner, and the like.

Aims of the luncheon hour. The teacher in charge of a table at lunch should keep several aims in mind. The ideal of a cleaned plate is a good one for a nursery school. Since children differ considerably in the amount they can eat, each child should be served only the amount that experi-

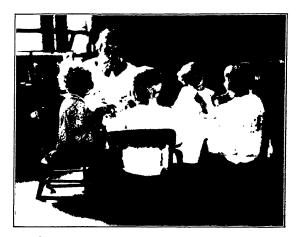


FIG. 9.—THE NURSERY SCHOOL MAKES EASY THE ACQUIRING OF GOOD EATING HABITS.

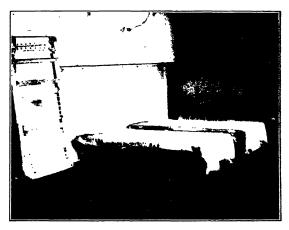


FIG. 10.—FOLDING COTS AND MOVABLE SCREENS TRANSFORM A PLAYROOM INTO A DORMITORY.

ence shows he will probably be able to consume, and he should then be expected to eat all that is offered. One of the most important attitudes to establish early is the willingness to eat a little of everything which is on the plate. If a child day after day is required to take at least "one bite" of some disliked food, the probability is that he will gradually build up a tolerance or even a liking for that food. Another important point is a business-like attitude toward eating. Mealtime should be an enjoyable occasion but there are many advantages in learning to eat the food as a matter of course and not as something to rave or to rant about. After the fundamentals of good eating habits have been established, the teacher may turn her attention to encouraging the child to feed himself skillfully and handle his utensils well, and to control his desire for physical activity during the meal. Most of the fourvear-olds may be relied upon to feed themselves. The vounger children may require some assistance, or in case of some disliked food actually to be fed. Although the , aim should be to have each child feed himself, there are cases of fatigue, of awkwardness, of extreme slowness when a little help from the teacher will accomplish marvels.

Food intolerance. Certain problems arise in connection with the feeding of nursery school children. True food intolerance where the child is physically unable to digest certain foods is very rare. If it appears it is most likely to be an intolerance to egg.

Nonhunger. One of the most common of the problems connected with eating is that of nonhunger, in which the child is not hungry enough to eat even the foods he likes best. As in the case of all other problems the cause should be discovered if possible. If nonhunger appears in a child who ordinarily has a good appetite, it may very likely be that the child is about to develop a cold or some in-

fectious disease. Such temporary lapses of appetite may, then, be ignored except as probable symptoms of illness. Prolonged cases of nonhunger may also be due to some physical conditions, such as diseased tonsils, enlarged adenoids, or decayed teeth. The difficulty may be due to the kind of food eaten and the time of day in which it is consumed. Highly flavored foods dull the appetite for more bland foods. A diet which is overladen with sweets or fats or lacking in vitamins will result in lack of hunger for all foods. A child who is allowed to eat between meals frequently will not be sufficiently hungry to eat a good meal. After these two main causes, physical condition of the child and food eaten, there may come any number of other factors which may be important in a particular case. The child may be overstimulated or overfatigued and so "too tired to eat." He may be oppressed by nagging, worry or unhappiness. He may lack fresh air and exercise. He may be negativistic and stubborn. Almost any unfortunate physical or mental condition may be the underlying cause of lack of hunger.

Special likes and dislikes. Practically every child of preschool age has at least a few definite likes and dislikes in food. Such dislikes are entirely a matter of training, and may be overcome by the opposite kind of training. The most common cause for a child's disliking any particular food is a similar dislike exhibited by one of the parents. At other times a dislike may have been aroused by some one unpleasant experience with it. A food which when first presented was too hot, or overseasoned, or which was so very well liked that too much was eaten with decidedly disagreeable results, stands a good chance of being refused the next time it is offered. There may, on the other hand, be something about the food itself which is disagreeable. Foods which are too sweet such as rich desserts, sweet

potatoes, and squash are frequently refused. Foods which have an unpleasant consistency such as spinach or macaroni may be disliked. The color and appearance of the food was found by Sweeney to cause many of the refusals. Dark vegetables like Brussels sprouts and spinach as commonly served are sufficiently repulsive to be rejected by many children without a trial. Finally, a food may be refused because it is the wrong temperature. Children do not like their food either as warm or as cold as adults like theirs.

Slow and rapid eaters. A problem of a different sort arises with the very slow and very rapid eaters. The slow eaters are more of a problem than the fast. The fast eaters are probably getting a great sufficiency of food and may be slowed down a little without great difficulty. The slow eater is a problem not only because he dawdles over his food, but also because he is not getting enough to eat. Great deliberateness in eating may be due to lack of appetite or to fatigue, in either of which case it really belongs among the problems already discussed. The slow eater may, however, be slow merely because he is distracted by the other children or by observers in the room. If he cannot be taught to keep his attention on his food, it may be necessary to remove him to a room by himself or to adjust a screen so that he cannot see the other persons in the room. The difficulty may, on the other hand, be due to trouble in handling the utensils. If the child cannot manipulate a fork easily, it may be worth while to let him use a spoon. The food should, of course, be prepared with the idea that the children will be feeding themselves. For this reason creamed peas are more suitable for the nursery school than buttered peas, and roast beef which has been put through a coarse meat chopper will be more desirable than when presented in a slice.

144

Table manners. Problems connected with table manners are of minor importance when compared with the cases where the child fails to get sufficient nourishing food, and may, for the time being, be ignored if more vital problems are present. If the children are in the company of adults whose table manners are good, they will in time adopt such manners themselves. If a child becomes confused about the way to hold his fork, he can check himself very easily by glancing at the teacher. An occasional reminder to the child to wipe his mouth after drinking milk or to keep his other hand in his lap are ordinarily all that the teacher may need to give besides setting a good example herself.

General suggestions. Certain general suggestions may be made as to the solution of eating problems in the nursery school. If the child has shown similar difficulties in eating at home also, the mother should be asked not to visit the school at lunch time until the teacher has the situation well in hand. The adult at the table with the child is the most important factor. She must keep an unemotional attitude and live in the daily expectation that that day the child will eat well. This degree of optimism may be hard to attain, but it is well worth the struggle. The food should not be forced on the child. Even though he needs the food, one meal is not worth the risk that the child will get into a bad attitude toward food in general. The teacher should, of course, know the characteristics of the individual children. The child who refuses to eat in order to attract attention to himself should be treated quite differently from the child who revolts against authority and is negativistic. Likes and dislikes in food should not be discussed at the table. Rather should the teacher take it for granted that the food is to be eaten whatever the individual taste. She should, in other words, try to give the child a matter-ofcourse attitude, in which the food is not overemphasized.

In case a child dislikes one particular food, repeated eating of small amounts every time the food is served will ordinarily overcome the dislike. In the case of a very restless child, the teacher may give some legitimate excuse for activity, such as waiting on some of the others. Too much conversation and playing at the table should be discouraged, and the business of eating should occupy the time. Many exceptions may need to be made in the case of new children. These newcomers should gain a favorable impression of the luncheon hour and to give them this may mean the relaxing of certain rules which later may be enforced without ill effect. Perhaps the chief thing for the teacher at luncheon time is to remember that patience is essential.

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CHAPTER VIII

SLEEP IN THE NURSERY SCHOOL

THE question of how much sleep is taken by children of preschool age is one which has been receiving some attention of late. What few data have been collected, tend to show that the standards set in most books on child training are too high. If the nursery school provides for naps, as all full day nursery schools must do, then the school should know what length nap may be expected.

Experimental data. In October, 1927, the Institute of Child Welfare at the University of Minnesota collected sleep records on 1,186 children between the ages of 1 and 7. When their results are approximated to the nearest whole number and the cases are grouped in one-year groups with 2 years meaning "2 years 0 months through 2 years 11 months," the following table is obtained:

SLEEP OF THE PRESCHOOL CHILDREN IN MINNESOTA

	MEAN TOTAL SLEEP		Naps			
Age		MEAN DAY SLEEP	Mean Length When Taken	Mean Time before Sleep	Mean Number per Week	Per- centage Taking None
3	12 hr. 39 min. 12 hr. 8 min. 11 hr. 43 min.	1 hr. 6 min.	113 min. 104 min. 95 min.	24 min.	6 5 3	4 15 33

From this table, it is clear that these children of nursery school age were sleeping in the daytime about an hour on the average. When, however, the days on which no nap was taken were ignored then the average length of sleep when a nap was taken came to between an hour and a half and two hours. Another interesting point is that the mean length of time in bed before falling asleep was a quarter to half an hour. The percentage of children taking no naps at all increases as is to be expected, with advancing age.

Records were kept for thirty weeks on thirteen nursery school children in St. George's School for Child Study in Toronto. These children ranged in chronological age from 2 years 0 months to 4 years 4 months. The percentage of children in that group who slept at nap time ranges from about 52 to 65, depending on the day of the week, with some very slight indication that naps were shorter on Mondays. The mean length of sleep when a nap was taken was 65 minutes. No significant seasonal or sex differences were found. It apparently made no difference whether the number of children in the sleeping room was seven or twelve. The older children slept less often than the younger children though when they did fall asleep, they slept about as long a time.

In an as yet unpublished study of posture during sleep, M. Adelia Boynton obtained records on 56 rest periods of ten two-year-old children; 91 rest periods of thirteen three-year-old children; and 101 rest periods of fifteen four-year-old children. She found that the mean length of sleep when a nap is taken was 94 minutes for age 2; 85 minutes for age 3; and 69 minutes for age 4. These figures, although less than the figures for Minnesota children at home, are larger than the Toronto figures. Miss Boynton found the mean time in bed before going to sleep to be 29 minutes, 35 minutes and 32 minutes for the age groups 2, 3 and 4 respectively. The percentage of rest

periods when these children did not sleep were for ages 2, 3 and 4 years; 5, 20, and 31 per cent respectively.

Miss Boynton's data cover children who should be very similar to the children included in the study of the Minnesota children. If we assume that the two groups are comparable, we may conclude that children take somewhat longer naps at home than at school. It is probably safe to say also that they go to sleep somewhat more quickly at home, though the difference between the times before sleep in the two records is probably not as great as it appears. In the mothers' reports, the children are frequently recorded as "asleep" at the time when they no longer talk, sing or shake the bed; in Miss Boynton's study, however, the records were taken in the room with the children and the estimate as to the time the child fell asleep is probably more accurate. The chief applications to be made from the studies are that a great majority of the children of nursery school age take afternoon naps of varying lengths, and that since most children require about half an hour before they fall asleep, all should be expected to remain on their cots for at least three-quarters of an hour. Most schools consider that if the child has not fallen asleep at the end of an hour, he may be assumed to have had enough rest and may be allowed to get up. The studies also show that great differences may be expected in the amount of sleep taken by individual children. We find some nursery school children who practically never take a daytime nap, others who nap consistently and others who represent all degrees between these two. Age seems to be the greatest determining factor in the length and frequency of naps. Another factor is the individual difference in total sleep requirement of children. Some children seem to compensate for loss of nap with longer period of night sleep, others apparently get along just as well on less total sleep. The quality of sleep, whether restless or relaxing, general physical condition of the child, and bodily activity and nervous tension of the child all to some extent determine the quantity of sleep required by any child. Therefore it is important that the school have accurate information regarding the sleep habits and requirements of its children.

The morning rest period. In some schools where very young children are admitted, it is necessary to provide for a morning nap in addition to the afternoon nap period. A short rest taken before lunch, either on beds or on the floor is customary. This is primarily for relaxation and sleep is usually discouraged at this time.

The sleeping arrangements. The first question to be settled in arranging naps for a nursery school is where the children are to sleep. There are many advantages in having the naps taken out-of-doors if this can be arranged. The children should not, of course, lie in the bright sunshine but if the playground furnishes a level shady corner and if the building is so arranged that there is no trouble about moving the cots in and out, this is an ideal place to sleep during the warm weather. If the children are to sleep out-of-doors in cold weather, the place for the cots must be well sheltered and some special provision be made in the line of sleeping-bags. A sleeping porch which may be opened wide for mild weather and enclosed for moderate ventilation in extreme weather provides an excellent place for naps. Most schools have to be content with an ordinary room for naps, and some schools have to rely on one of the play rooms transformed by setting up collapsible beds.

The sleeping room should be large and well ventilated. There seems to be some evidence to show that if the room contains many children, the naps will be shorter. Screens which may be slipped between adjacent cots give

a feeling of isolation that prevents much of the talking and whispering that arise if two children can see each other as they lie on their beds. The temperature of the sleeping room should be fairly low, probably about 58 or 60 degrees Fahrenheit. Other factors which should be controlled as far as possible are the humidity and the noise. The bedding should, of course, vary with the temperature. The kind of bedding to be used has been already discussed in Chapter III.

The nap hour. The routine of the nap hour will necessarily vary from school to school. In most schools the children go directly from lunch to the toilet room and then on to the sleeping room. If there is an interval between lunch and the nap, this time should be spent at some quiet activity that will put the child in a quiet mood. While the children are in the process of going to sleep, they may need one teacher to every six or seven children. After they are all asleep or very quiet, one teacher may be all that is needed in a room of fifteen or twenty children. The atmosphere of the room should suggest sleep to the children as they enter. Since experience has shown that it is much easier for a child to go to sleep if the room is dark, the shades are drawn and the windows properly adjusted before any children arrive. The children are taught to go to the toilet and then come into the sleeping room very quietly and one at a time. After his shoes are removed, each child goes promptly to his own cot and his covers are tucked in by a teacher. In some individual cases the child may be undressed and put into a sleeping garment. The degree of physical activity which is allowed the child while in bed differs with different schools. Most schools, however, expect the child to stay in bed after he is once there, and expect him to lie quietly enough to keep his covers tucked in. The degree of vocalization to be permitted is also variable. Absolute quiet is almost impossible to enforce but it is a comparatively simple matter to restrict the child's vocalization to soft talking or singing to himself. In general, the children seem but little distracted by the subdued restlessness and the murmurings of the others. As to length of nap, the usual rule is that if a child goes to sleep he may get up when he awakens; if he does not sleep, he may get up when the teacher comes and speaks to him.

The child who does not sleep. A number of problems arise in connection with the nap hour. There is the question of the child who seldom or never goes to sleep in the afternoon. Such children may disturb the sleeping children, and when possible they should rest in a room by themselves. That room should be kept as quiet as possible so that if any child is ready to sleep on a particular day, nothing will interfere with his nap, but a room of quietly resting children is not the same as a room where almost every child is asleep. Then there is the question of the child who does not sleep readily. He may be isolated if a small extra room is available. He may be sent to the sleeping room very early in an attempt to get him to sleep before the others come in, or he may need to have a teacher stationed by his bed to keep him quiet long enough to fall asleep. Usually the mere presence of the teacher will have a sleep-inducing effect. Any play or entertainment at this time should be discouraged, though an extremely restless child may respond satisfactorily to monotonous verbal repetitions or gentle stroking.

The child who disturbs others. Once in a while there will be a child who is so noisy at nap time that he disturbs the sleep of all the others. This may be unintentional on his part or he may take a malicious delight in screaming for the fun of waking the others. Such a child

needs special attention in school. He cannot be ignored as he might well be at home, because the school is responsible for the sleep of the other children and it cannot have all the other children disturbed regularly while one child is being trained. Many of the deliberately noisy children will quiet down immediately if they learn that noisy children have to sleep in a room alone. If the noise has been a social attempt, isolation will ordinarily cure it. Certain children may also disturb the room by their restlessness. The child who frequently gets out of bed either purposely or involuntarily, as in the case of two-year-olds who are accustomed to sleeping in cribs, is a menace to the sleep of the others and may have to be isolated.

Undesirable habits at nap time. Other problems may arise at times in the shape of bad habits connected with nap time. The children who frequently wet the bed at this time should be provided with a rubber sheet and with diapers for the sake of their clothes and the bedding. The chief training method for such cases is to take them to the toilet at the first stir signaling their awakening. Since most bed-wetting is done just as the child wakes, if we can get him to the toilet promptly, we save many a wet bed and we are then working in the right direction for training. Other undesirable habits connected with sleeping are thumb, finger or blanket-sucking and handling of the genitals. These habits are discussed in general in the next section, but certain suggestions may be made with reference to their appearance at the nap time. Many children have been "cured" by teaching them to hold onto the bedding, to grasp some doll firmly, to sleep with the hands under their heads or their arms extended above their heads. Some thumb-suckers have their activities prevented by the application of some simple device which prevents the child from getting his thumb into his mouth or which

takes all the joy out of the performance. An occasional child may need the attention of some teacher for many days until he gets into the habit of going to sleep without resorting to his undesirable habit. At times the teacher may hold the child's attention by the monotonous repetition of some verse, or by having the child perform some simple finger play until he is too sleepy to move his hands. Each case should be studied for itself and oftentimes the coöperation of the family will be needed.

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CHAPTER IX

TRAINING IN SOCIAL HABITS

UP to this point we have been concerned with habits connected with certain definite periods during the day such as nap time and mealtime. We come now to the training in the more general so-called "social" habits, habits that facilitate or hinder the adjustment of the individual to a group of other individuals and to society at large.

Paradoxical as it may sound, no person can be considered a socially well adjusted individual unless he can take care of himself with little dependence on others. Montessori in her *Montessori Method* says:

Little children from the moment in which they are weaned are making their way toward independence. . . . Any pedagogical action, if it is to be efficacious in the training of little children. must tend to help the children to advance upon this road of independence. We must help them to learn to walk without assistance, to run, to go up and down stairs, to lift up fallen objects, to dress and undress themselves, to bathe themselves, to speak distinctly, and to express their own needs clearly. We must give such help as shall make it possible for children to achieve the satisfaction of their own individual aims and desires. All this is part of the education for independence. We habitually serve children; and this is not only an act of servility toward them, but it is dangerous, since it tends to suffocate their useful, spontaneous activity. . . . We do not stop to think that the child who does not do, does not know how to do. . . . Who does not know that to teach a child to feed himself, to wash and dress himself. is a much more tedious and difficult work, calling for infinitely greater patience than feeding, washing and dressing the child one's self? But the former is the work of an educator, the latter is the easy and inferior work of a servant. . . . Needless help is an actual hindrance to the development of natural forces. . . . The man who, through his own efforts, is able to perform all the actions necessary for his comfort and development in life, conquers himself, and in doing so multiplies his abilities and perfects himself as an individual. We must make of the future generation, powerful men and by that we mean men who are independent and free.¹

Self-help. The nursery school helps the child develop independence in a number of ways. In the first place, the school gives him considerable freedom so that he can, through experience and exercise, build up control of muscles and improve his bodily skill. On the physical side, the child gets much practice in movements that require considerable muscular coordination. He buttons and unbuttons his clothing. He laces and unlaces his shoes. He pours milk from pitchers into glasses and he carries plates of food. Many mothers are skeptical of the ability of preschool children to assist in waiting on the dinner table. yet out of five hundred times that milk was poured by children in one nursery school, only eight times was any milk spilled. In the same school out of one thousand meals in which the children carried the plates of food to and from the serving table, only three times were dishes dropped and only twenty-one times was any food spilled. Not only is the nursery school child given considerable physical liberty but he is given an attitude of confidence. He is made to feel that he is more or less independent in action and that he has his own existence apart from the adults who happen to be supervising his activities.

Through equipment and routine the school makes it easy for the child to help himself. The play materials ¹Po. 96-101.

provided are ones which are interesting to him and which he can use without consulting with the teacher; the furnishings of the rooms are child-size and encourage selfhelp. The play material is within his reach, the tables are low enough to be convenient for him. The locker and toilet rooms make it easy for him to put away his outside wraps and to take care of his toilet needs with a minimum of assistance. The schedule of the school is kept as simple as possible and the routine activities such as the toilet procedure, eating and sleeping are always performed in the same way and the same order. A routine which is simple and always the same is easily acquired by a child who may be totally incapable of making head and tail out of a schedule which is frequently altered. Given this simple routine, the child is allowed plenty of time to do what is expected. Children can do many things for themselves if they are not hurried, but the person in charge must expect the child to wash his hands or lace his shoes less quickly than she herself could do it and should not be surprised or irritated at frequent interruptions for conversation and even for wholly inactive moments when the child is apparently lost in thought. Another way in which the school teaches the child to help himself is by giving him a great deal of practice. After being encouraged to lace his shoes as well as he can every day for months, he will gradually come to be independent of adult assistance in this activity.

More important than the actual provisions made by the routine and the equipment of the school is the attitude of the teachers toward self-help. The person who expects to help a child in all the little details of daily life will have abundant opportunity to give assistance. On the other hand, the person who assumes that the child will help himself as much as he can, will find that the need

for her assistance falls off every day. Each child must in this regard be treated as an individual. The child who has been encouraged to be independent at home will require less help at school than the child who has been babied for years. The overdependent child may need to be urged and even required to try to help himself.

Use of leisure time. Closely connected with the ability to take care of a person's own needs is the ability to make good use of leisure time. With the speeding up of modern life the average person, even the child, has more spare time than he has had before. The teaching of wise use of this extra time is one of the problems in the training of young people and the nursery school age is not too early for a beginning of such training. From a very early age the child should be taught that it is better to be constructively busy than idle and that there are many interesting things to do. If the child is provided with a rich environment and if he is guided by an experienced and versatile adult, he should develop interests which will allow him to keep occupied without constantly asking "What can I do now?" and without expecting the adults in the situation to give him constant attention.

Besides providing many widely different types of play material from which the child can choose his own occupation, the nursery school provides the opportunity for the building up of various skills. The child who has been accustomed to the use of scissors and paper from an early age has at his command hours of absorbing interest. He may cut out pictures, make scrapbooks, make paper dolls and furniture or cut all sorts of designs free-hand. Crayons, paints and chalk may prove to be the salvation of a child who is familiar with their possibilities. Practice with wood and tools gives the child joy and satisfaction in construction as well as pleasure in using the finished product. Clay

and sand furnish media for self-expression which continues to be satisfying year after year. Garden tools and plants provide for still other types of interest. In the well-conducted nursery school each child is encouraged to try different materials often enough to make him feel at home with them and to find out whether or not he has any special interest in that particular activity. Not only does the school provide for general acquaintance with many materials but it also encourages the development of desirable hobbies and enthusiasms. The child who is intensely interested in trains is stimulated to express that interest in as many ways as possible, in drawing trains, in building trains from wood, in using blocks, sand, clay, paper-cutting, storytelling and even, perhaps, beads and pegs to depict various qualities of trains. If the child, however, plays train with the same piece of apparatus in exactly the same way month after month it may be well to make a definite effort to give the child some other occupation. With the exception of the case in which he shows no development in his play, the child may be allowed to use the material in his own way provided two requirements are met. The material must not be used in a way to disturb another child's play, either by interfering at the time or by treating the same material in such a way as to limit its use by another at some later time. The second requirement, that the child should keep constructively busy, is more difficult of interpretation but may be recognized, at least in its extreme forms.

Adjustment to the group. Perhaps the most important training which the nursery school has to offer is the adjustment of the child to the group. This is also the most difficult problem in nursery school life for the child. The new child may come from a home where he is used to the care of several different adults (though nothing like the number of adults he will find in some schools) but

seldom does a child come to school at the age of two already used to the company of many other children of his own age. He finds, then, at the school many adults in place of few and many children in the place of none or a very few. The mere difference in number of individuals makes one great contrast between home and school but still more important is the difference in the attitude of the adults. For the first time in his life, probably, the child is in a situation in which there is no adult at hand who is overwhelmingly interested in him personally and for the first time he stands alone on his own personality.

In many ways the nursery school can simplify the child's adjustment to the group. The very first introduction of the child to the school should be as happy and as smooth as possible. The best conditions for the reception of a new child are found only occasionally but practically any school can refuse to accept new children more rapidly than one every two or three days. It is comparatively simple for the school to absorb one new member, but if we try to start three or four new children at school on the same day our difficulties are multiplied eight- or ten-fold. The introduction is also made easier if the new child already knows some older child in the school and if he is willing to come with the older child without any member of his own familv. Sometimes difficulties arise when a brother or sister comes for the first time with an older sibling. The attachment may be so great that the two cling together and avoid all other children. This effect may be more unfortunate for the older than for the younger child and the teachers may be forced deliberately to separate the siblings until each has settled down into his own appropriate group in the school. If the mother comes with the new child, she should be asked to keep out of the picture just as much as is possible. The child should be led to feel

that the mother is not a vital part of the nursery school and that when she is there she does not expect him to pay much attention to her. In some of the happiest adjustments of the new child to the nursery school, the mother brings her knitting or a book, settles herself in a corner and is apparently concerned only with her own activities, although she remains within sight in case the strangeness of the situation may overcome the child. On following days the mother may absent herself from the room for longer and longer periods until the child is content with the assurance that she is coming back after a time. The first day at school should be rather short, even if the child is thoroughly enjoying himself. A gradually lengthening day will accustom the child to the school more quickly than too many full-length days at first. Since many behavior problems center about eating and sleeping, it is better to ask the mother not to stay during the first luncheon periods and never to visit in the sleeping room.

To further the ease of the adjustment of the child to the group, the nursery school keeps its social situations as simple as possible. There are few rules and these are easily understood. Much of the day is left open for "free play" in which the child chooses his own activity and plays at it as he likes. During this period the child is allowed to make social contacts or not as he will. The two-year-olds, if left alone, will engage usually in individual play though perhaps they will be near, and enjoy being near, some child of their own age. The four-year-olds will often be found trying out some form of loosely organized coöperative group play interspersed with periods of solitary play.

A few fundamental social attitudes should be instilled by any good nursery school. There is, in the first place, the all-important understanding of the rights of others.

These rights may be simple property rights, the difference between toys belonging to an individual and toys which belong to the school; or they may concern the division of school play material among the various children. Children in a large group where there is not enough material to supply each child with duplicates, readily learn a certain give and take attitude. They learn that one child cannot surround himself with all the choicest materials to the exclusion of other children but that he must select one article and acknowledge the right of each of the others to a similar selection. They learn that the child who is busy with a particular toy for the time being "owns" that toy and will be allowed to keep it. They learn that the activities of other children are not to be interrupted. that any play which disturbs other children cannot be permitted. They learn, in brief, that other children have rights of their own which must be respected. Less often met, but perhaps more difficult to deal with, is the child who needs to be taught to stand up for his own rights. The nursery school should feel the necessity for teaching this as well as for teaching the rights of others. The child must, sooner or later, if he is to become a well adjusted adult learn to think of himself as one of a group, each member of which has certain specific rights.

The desirable social attitude involves not only a certain feeling of independence in each member but also a feeling of dependence or interdependence. No person has the right to feel absolutely independent of the society about him and similarly the child should feel the importance of the group working together. He should be as ready to help others who desire help as he is to let others alone who wish no help. He should also be ready to ask for and to accept the help of other children and of the teachers.

Language as a form of social intercourse. One of the most important aids to social intercourse is language. The preschool child is in the most important stage of language development and the nursery school may aid this development in several ways. The nursery school teacher, in the first place, talks to the children, she speaks clearly in a low pleasant tone, and she uses correct English. The children thus constantly have good examples. In the second place, the school provides an atmosphere which stimulates conversation. There is freedom to talk and what is more there are other children and adults to talk with and interesting things to talk about. In the discussion of the organized language period we have suggested some points for development of language in the nursery school but the chief practice and best opportunity for stimulating the acquisition of language must come as an incidental factor all through the day. The school may in an occasional case use more strenuous methods to encourage the child to talk. Every once in a while a child enters school who, because he is an only child or the baby of a large family or for some other reason, has received so much attention from adults that he has been able to satisfy all his desires without acquiring spoken language. He points, grunts, or squeals and his wishes are fulfilled. Toward such a child the teacher has a real duty to perform. She must make him understand that language is a necessary medium for communication and that no longer will adults respond to gestures and cries. Many a lazy child has been persuaded to talk by the simple method of refusing what he wants until he makes some effort at naming the object.

Emotional control. The child who recognizes the rights of others and who can converse with others may still be poorly adjusted socially if he has not acquired sufficient emotional control. Early in life the child should learn

that minor mishaps such as bumps and falls and accidents to play material are not worthy of his wrath. Righteous anger if it result in better performance next time is desirable, but temper tantrums are a mere waste of energy. Under proper guidance the child will learn that he will be more acceptable socially if he is well controlled than if he is easily upset. We might adapt Lowrey's list of desirable and undesirable traits in adults to a list applicable for children. We might say, for example, that children who are best liked are those who are cheerful, honest and tolerant; those who are most disliked are those who are selfish and irritable.

Behavior problems. Part of the effort of any school which is trying to give children desirable social attitudes must be spent, of course, in combating undesirable tendencies. Such tendencies are usually classed together as "behavior problems" and as such have loomed large in recent literature.

Other things being equal, the younger the child the more easily he is diverted from undesirable activities. The mother or teacher who recognizes early symptoms of a "problem" can frequently exert a wise unemotional pressure which will prevent the development of a true problem. Difficulties connected with eating, sleeping, and toilet processes have been considered in connection with the appropriate part of the nursery school schedule. The other maladjustments met with in the nursery school are largely difficulties in the relationship among children.

A child's attitude may be more readily changed if he is subjected to the same type of treatment for the entire twenty-four hours of the day. For this reason many schools insist upon very close coöperation with the home in all matters of behavior. Other schools feel that although this may be the ideal situation, practically it is impossible to



FIG. 11.—THESE THREE-YEAR-OLDS ARE GIVING EACH OTHER INFORMAL TRAINING IN LANGUAGE AND SOCIAL HABITS.

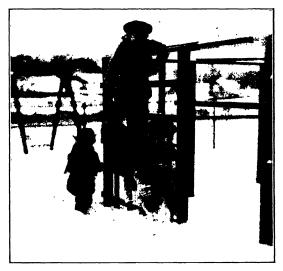


FIG. 12.—PLAY SUITS THAT PROTECT THE CHILD FROM HEAD TO FOOT ALLOW OUTDOOR PLAY IN COLD WEATHER.

give many mothers the exact attitude and mode of attack of the school and that rather than have the child open to two dissimilar methods it may be better in the individual case to concentrate the school's effort on the child at school and for the time being refrain from interfering with the home situation. It is not unusual to find an overanxious mother who needs only the suggestion that the school finds her child in need of some special sort of treatment to be convinced that he is an incipient criminal or at least an intolerable bully. In general the school will need to consider carefully whether the problem is one which lies strictly within its own province (such as infringement of some bit of school law) or whether it is one which can best be met by enlisting the definite assistance of the home. If the home is to be interviewed, then, of course, arise all the questions of approach and explanation.

There are few actual data on the frequency of behavior problems. Indeed there is little uniformity as to what is considered a problem. Is a child an eating problem because he balks at spinach? And is he a social problem when he refuses to let a neighbor child play with his favorite toy? Foster and Anderson found feeding difficulties to be most frequent in the cases which they considered problems and that after those came fears, trouble with authority, nervous habits, speech difficulties, temper tantrums, sleeping problems, and difficulties with playmates.

Negativism. Of the types of social behavior problems perhaps the one met most frequently in the nursery school is negativism. In its extreme form the negativistic child refuses to do anything which is suggested. This tendency is a quite normal one at the period when the young child is beginning to feel his independence, probably because the simplest way of exerting independence is by refusing to do something which has been suggested. Such a manifestation

of self is usually very transitory and will pass off whatever the treatment. Sometimes, however, the tendency appears in older children as the result of imitation, of the desire to dominate, of repression, of being subjected to too many demands or requests, or most often of all of some emotional disturbance. The treatment of the individual case should be determined by the probable cause of the state of mind. In general the steady use of tact and avoidance of as many issues as possible will give the child few opportunities for refusing and through lack of practice the habit will drop off. In extreme cases of negativism, as in extreme cases of all sorts of social difficulties, exclusion from the group proves effective.

Thumb-sucking. Thumb-sucking and nail-biting may be classed as social problems since the embarrassments to which they subject the adult are those of social inferiority or conspicuousness. In these habits there clearly must be definite cooperation between home and school, since thumbsucking at home may cancel all the effect of non-thumbsucking at school. Thumb-sucking, finger-sucking and nailbiting seem to be alternate forms of the same tendency. This tendency may be due to a hang-over of infantile reactions. to an accidental pleasurable stimulation or to direct imitation of another child. The problem is particularly keen at bedtime or at nap time. Since idleness provides an excellent opportunity for putting thumb or fingers into the mouth, the child who exhibits these tendencies should be kept as active and busy as possible. No child can suck his thumb while he is carrying a very large block across a room. Nor can a child put himself to sleep by sucking his fingers if he is directed to hold the bedding or a doll tight in both hands. The general rule might be: give the child something else to do with his hands. With younger children a simpler procedure may be to use some sort of appliance which takes

away all pleasure from the sucking. Adhesive tape, a soft mitten or a thimble of some sort which is not air-tight and makes the child draw in air when he sucks may be effective. Cardboard cuffs or other arrangements which prevent the child from bending his elbows may be a simple solution of the difficulty. These devices should never be used as punishment but only when coöperation of the child has been enlisted, or when they may be adjusted without any suggestion as to their true purpose. Any method which results in resistance or tends to call the child's attention to the habit is undesirable. A little girl who was a "confirmed" thumbsucker and had circumvented every method attempted gave up the habit entirely when she accidentally knocked out one of her front teeth. While such drastic treatment is hardly to be recommended for every thumb-sucker, this seems an extreme example of the dropping of an activity because the joy has been taken out of the activity.

Handling genitals. A habit which distresses the mother and which appears from time to time in some members of any group of children is that of handling the genitals. As a general thing, the behavior occurs only at nap or at bedtime and the cause seems in almost every case to have been the accidental discovery that the activity resulted in a pleasurable sensation. The problem is one which, like thumb-sucking, is usually best met by the substitution of some other form of activity. If the child is likely to handle his genitals when he goes to bed, the teacher or mother may give him something better to do with his hands. A toy may suffice to keep his hands occupied. In an extreme case it may be necessary for a time to persuade the child to carry on some of the simple finger-plays until he drops off asleep. Occasionally there seems to be a physical basis for this habit such as irritation from too tight clothing, uncleanliness or need for circumcision. Therefore a physical examination is indicated when the habit persists in an aggravated form.

Temper tantrums. Temper tantrums are, in general, much less frequent in the nursery school than in the home. Even the child who "throws" tantrums frequently at home may never display one at school. This is probably due to the fact that temper tantrums are enhanced by an emotional atmosphere, to the fact that the child finds more interesting occupations at school than at home and above all to the fact that at school he accomplishes nothing satisfactory from such an exhibition. The logical and the most commonly effective treatment of temper tantrums in the school is immediate exclusion from the social group. Children are in general little impressed by temper tantrums in others and if the teachers are also unimpressed, the average child will come to see their futility.

Antisocial behavior. A sort of generalized antisocial attitude appears which is quite different from the unsocial exclusiveness of the two-year-old. Antisocial behavior may appear as striking another child or deliberately trying to interfere with his activity. Such actions may be due to any one of a number of causes. The child may be trying to tease and thus express his superiority. He may be selfish and adopt a dog-in-the-manger attitude. Or he may actually have acquired a feeling of inferiority and be trying to find some possible form of self-expression. The teacher has a twofold responsibility directed toward the attacker and the attacked. She may have to exclude the belligerent child from the group or isolate him for a time, but the most effective punishment comes from the children themselves. One illustration from the University of Minnesota nursery school may, perhaps, make the point clearer. Jessie was a large, very strong girl of four. Her home activities consisted almost wholly of rough and tumble play with two

older brothers. The parents were of the "literary" type with their heads so far in the clouds that little less than the actual smashing of furniture penetrated to their heights. Jessie entered the nursery school when she was two and immediately began to make advances to other children by knocking them down unexpectedly. She seemed to get little pleasure from their distress but it was apparently the only method of approach which she knew. The teachers were absolutely unable to explain to her the poor points in her behavior and all punishments seemed to pass her over untouched. The parents thought she ought to be "spanked hard" but that the school refused to do. In a short time she became the school bully, studiously avoided by all except the largest children and looked upon with suspicion by these. At intervals and with particular children Jessie would be very affectionate and motherly, but these were comparatively rare occasions. For two years this behavior continued. Then one day Jessie went too far. As she passed by Henry she gave a vicious little tweak to his hair and Henry, the mild, much enduring Henry, whirled on Jessie and knocked her down. It is a question who was most surprised, Henry, Jessie, the other children, or the teachers. But the other children were the most prompt in action. The school bully was down and for the moment dazed and their moment had come. They all pitched in and returned some of the blows which had rankled in their minds for so long. The punishment was brief because after a moment the teachers interfered, but the punishment was effective. Jessie was no longer invincible. She saw at last that her behavior was intolerable and she promptly began a steady but labored improvement. The improvement was not limited to Jessie, for Henry, from that one incident on, gave indication of an increase in his own, still rather limited, opinion of himself. Here one brief bit of discipline administered by the children

was more effective than months of all the pressure the adults in the situation were able to exert. The degree of social pressure which is brought upon the young child by the other members of the group is frequently overlooked, but all nursery school teachers realize that the disapproval of the group and the withdrawal of the privilege of associating with the group are the most effective means of control in the nursery school.

Fears. Fears are relatively uncommon in the nursery school and when they appear usually are founded on some experience at home, a threat of the parent, a particularly painful inoculation by some doctor, and so on. Such fears as do appear are usually conquered through the pressure of the group attitude. The other children are not afraid of the nurse or of having the dentist examine their teeth and so the individual child goes through with the desired activity. After repeated performances the fear drops away.

Jealousy. Jealousy is another problem which seldom appears in the nursery school. Since the teachers are careful never to exhibit any partiality toward any child, there is no basis for jealousy and seldom any manifestation of the feeling.

General suggestions. Certain general suggestions may be made as to the treatment of any behavior problem in the social life of the nursery school. The first step in any case should be to discover if possible the cause of the bad behavior. Has the child some physical defect such as infected tonsils? Has he defective hearing? or eyesight? Is he ill? Is he fatigued? Had there been some emotional difficulty at home that morning? Has there been an emotional upset at school? Is he imitating some other child? Is he attempting to dominate the situation? Did he happen upon success after such behavior at some earlier time? Or just what seems to have caused the misbehavior?

The form of punishment used will depend in great part on the cause which seems most likely to have been operative. Corporal punishment is of course not permissible in a nursery school and there is a question as to whether or not it is ever desirable with children who understand spoken language. Temporary physical restraint to the extent of holding arms and legs so that they may not injure others is occasionally desirable, and is probably the most effective way of getting the desire of the teacher over to the child who is screaming and beside himself with rage. Older children may behave in the desired manner for the sake of certain privileges which may be permitted those who behave well and may not be allowed to those who misbehave. In general, the social punishment of exclusion from the group is most logical and most effective. These, however, are measures which though useful at times are not universal in their application.

The nursery school is ordinarily able to keep its behavior problems down to a minimum by the application of certain general principles. Issues are avoided whenever possible. If there is something which the teacher thinks it necessary for the child to do, she gives him no opportunity to refuse. When it becomes necessary to stop some activity which is in progress, the teacher gives the child something better to do in place of what he is doing. The merely negative suggestion that a child stop doing something is much less effective than the positive suggestion that he do instead some other definite thing. When any activity has to be interrupted, the child should be given clearly to understand why it cannot be allowed. The exception to this is the case where the adult wants to keep the child's attention away from an undesirable habit and to focus it on something else. Generally speaking, as we have already said, the children settle their own problems better than these questions can be solved by

adults. George took great delight in such strenuous movements that he was a menace to any type of quiet group play and had frequently to be diverted to other occupations when the group of boys of his age were busy at block construction. Repeated explanations and removals on the part of the teachers had done little except relieve the situation temporarily. Then came a day when three of the boys had built a very elaborate house of large blocks. George approached in glee. A teacher reluctantly came near to remove George if he started his usual behavior. But before her services were needed one of the boys said, "You better stay outside, George, and be the dog." Thus the boys themselves solved the problem, kept George happy within the group, kept him busy at a satisfying activity, and kept their own play intact.

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CHAPTER X

CLOTHING FOR THE PRESCHOOL CHILD

THE clothing worn by a child may add greatly to his comfort or his discomfort, may be an aid or a hindrance to the maintenance of good health, and may have a considerable emotional effect. The most important service of clothing is to aid in the maintenance of a constant body temperature. A child too lightly clad may use so much of his food for heating the body that he has little left for growth. A child bundled up in too many clothes may become overly sensitive to cold. He is apt to perspire freely when indoors and cool off suddenly, chilling the body when he goes out. This tends to lower bodily resistance and makes the child more susceptible to disease. Heavy clothing, particularly if it is stiff, tends to hamper the child's movements. Clothing of the proper weight and design may help in warding off certain diseases, particularly tuberculosis. Clothing properly constructed may improve the child's posture. If the clothing is attractive and clean it may add greatly to the child's self-respect and to his desire to keep clean. Clothing, on the other hand, which is ugly, in bad repair or poorly fitted may be a source of constant irritation and may make the child self-conscious and embarrassed.

Experimental data. Some data may be found on the kind of clothing worn by children. A number of studies have been made on the weight of clothing. Early data give the weight of clothing of three- and four-year-old children as

six or seven percent of the child's gross weight. A record made in 1877 gives a slightly higher percentage for boys' than for girls' clothing. Another record reported in 1901 gives a difference in the opposite direction. A study reported in 1917 gives records on children from age two through four. Here the weight of the girls' clothing was found to lie between 31 and 39 ounces while for the boys the corresponding figures were 29 and 33 ounces. Calculated into percentages these weights are 5½ to 6½ per cent of the gross weight for girls; and 5 to 5\% for the boys. Records of the weight of clothing worn by children in one nursery school in Minnesota from October, 1926 through July, 1928 give percentages between 4 and 4½ of the gross weight for boys, and between 3½ and 4 for girls. These figures are definitely less than those obtained by earlier investigators in spite of the fact that the climate of Minnesota is in general colder than that where the other records were made.

Other investigators such as Wagoner and Armstrong have centered their interest on the ability with which children manipulate the fastenings of their clothes. The major results may be summarized briefly. Children below the age of two and a half seem not to have developed sufficient motor control to manipulate buttons and buttonholes; while children of three and older are interested and eager to button. By the age of three, 65 per cent of the girls and 40 per cent of the boys are said to be able to unfasten their clothes when going to the toilet; at the same age only 45 per cent of the girls and 30 per cent of the boys are able to fasten their clothes up again. These figures are, if anything, high since some children wear bloomers which are held up by an elastic band which requires little arranging. Parents report that buttons are easier for the child than hooks or snaps, that laced shoes are easier than buttoned, and that

buckled galoshes are easier than ones fastened by other methods.

In one study a group of nursery school children were timed in dressing after the underclothes were on and the stockings fastened. The boys were found to vary from five to twenty-three and the girls from six to fifteen minutes. There was no particular incentive for the children to hurry at this time other than the desire to rejoin the group at play.

Varieties of structural design of clothing worn by young children have received some attention from Sell and others. In a group containing no very poor and no very rich children, a great variety in designs was found. Not only did the design vary from child to child, but it frequently varied in the clothing worn by one child. One boy, for example, wore a union suit which opened in the center front, an underwaist which opened in the center back, a blouse which slipped over the head and had a short placket at one side and trousers with two side plackets. Each of these four openings was slightly different from the others. In order to dress herself entirely one little girl had to be able to fasten three lengthwise buttonholes in her underwaist, pull into place elastic at knee and waist of bloomers, fasten two snaps at the center back of her dress, tighten the draw string at the waist of her leggings, fasten five crosswise buttonholes in the center front of her sweater, adjust three buttonhole loops in the front of the neck of her sweater and fasten four buckles on each overshoe.

The garment which is reported as easiest for boys and girls to put on themselves is a one piece coverall, buttoning in front and having short legs and sleeves. Most mothers prefer short sleeves ending in a slip-over cuff for summer; some prefer long sleeves for winter. Raglan sleeves are said to be preferable for several reasons: they are easier for the child to put on, they allow a garment to be worn longer

without strain or pulling between the shoulders, and they are easier to make than set-in sleeves. Most mothers prefer union suits to two-piece underwear. Some prefer having the garters attached to the union suit, others choose a garter waist. Short, straight trousers are said to be easiest for the boys and bloomers finished with a band at the knee for girls.

Choice of material. The first consideration in selecting clothing for a child is the material from which it is made. Each of the different materials has certain advantages and certain disadvantages which it is well to keep in mind. Wool can absorb slowly a large amount of moisture and it is a strong material. It is a poor conductor of heat because the porous spaces in the material hold a layer of air through which body heat does not easily pass. It is, therefore, excellent for clothing when warmth is needed. Wool cannot be stored for long periods without the probability of destruction by moths. Wool is very elastic but it shrinks easily and is hard to launder. Another drawback to the use of wool is that when used next to the skin it is apt to be irritating. The shrinkage and the irritation are both reduced when cotton, silk or rayon is combined with the wool.

Cotton conducts heat more readily than either wool or silk and therefore is not so warm. A cotton garment or blanket is much heavier than a woolen one of the same warmth. Cotton crushes and creases easily, soils readily and shrinks somewhat in water. It absorbs water slowly and does not give it up readily, and so remains damp for a longer time than wool under similar conditions. Cotton can be stored for long periods of time without deteriorating and is not injured by alternating extremes of temperature. The greatest advantages of cotton lie in the fact that it is cool for summer wear, launders easily, and is inexpensive.

Silk is the lightest and one of the strongest materials. It

is very elastic and a poor conductor of heat. It sheds dust readily and does not soil as quickly as cotton. It absorbs water well and gives the moisture up fairly quickly. As a material for children's clothing, it has two definite disadvantages: it launders very poorly and it is expensive.

Rayon is frequently found as a substitute for silk, and if care is observed a rayon garment may give excellent service. In general, however, it creases readily, sometimes cracks, and is not half as strong as silk. It is particularly tender when wet. Rayon is not a warm material, but has the advantages of an attractive appearance and cheapness.

Linen absorbs water, but not perspiration, as readily as cotton. The moisture does not evaporate from linen, however, as quickly as from cotton and the result is that the damp linen is inclined to stick to the skin. Linen launders easily, is very strong, and does not deteriorate when laid away, but it crushes easily and is very heavy in weight.

Warmth of clothing. In selecting the clothing for a child, certain requirements should be kept in mind. The material should maintain the body temperature, should absorb body moisture readily, should give up the body moisture to the outer air, should be satisfactory from the hygienic point of view, and should be durable. In order to maintain the body temperature, the material selected should vary with the season of the year. The clothing should be warm enough in winter to allow the child to conserve his energy, and cool enough in summer to keep the body from getting overheated. Children are more apt to be too warmly dressed than too thinly. A good rule to follow is: A child should wear no more clothing than is necessary for warmth. In summer the clothing should let the sun's rays fall directly on as much of the child's skin as possible. This may be done by making a part, at least, of the upper part of the garment of marquisette or net.

If warmth is needed in the clothing, this should be supplied by the underwear. Knitted material provides air spaces which act as nonconductors of heat and keep the body heat in in the winter and the outside heat out in summer. For this reason, knitted underwear is the most satisfactory kind.

Absorption of moisture. The material which comes next to the child's skin should absorb the body moisture easily so that the perspiration is promptly removed, and it should also give up this moisture readily to the outer air. If the underwear absorbs the moisture and then holds it, the clothing will feel clammy and will stick to the body in an unpleasant manner.

Cleanliness of clothing. Children get dirty much more quickly than adults, partly because they do not object to dirt and partly because they tumble around on the ground and floor so much. Their clothing therefore requires laundering more frequently than the clothing of adults. This point should be borne in mind in selecting clothing for them. Smooth-surfaced cloth will shed dirt more easily than cloth with a rough surface, and for this reason the laundry problem will be reduced if the outer layer of clothing (for either indoor or outdoor wear) is made of a smooth, firm, closely woven material, such as a smooth gingham, percale, or cravenette. The outdoor costumes for children in winter are usually hard for the mother to clean and are expensive when sent to a dry cleaner. If a play costume could be devised in which the outer layer was impervious to wind and easily washed while an inner layer provided air spaces for warmth, mothers and teachers alike would rejoice.

Durability. The material for children's clothing should be selected on the additional basis of durability. At no other time will an individual give clothing as steady hard usage as in the preschool period, when he is frequently playing

vigorously and when he is so little concerned over the presence of nails, splinters, and stones.

Comfort. As far as structure of the garments is concerned, it should provide comfort. No child can enter heartily into play if his suit is too tight, or if the sleeves are so long that they keep getting in his way. It is especially important to have the child's clothing sufficiently large. It must not bind him anywhere, and particularly it must not bind in the neck and the crotch and the toes.

The design of the apparel should be selected carefully. The child's clothing should never interfere with the maintenance of good posture. His shoes should have a straight inside line, snug fitting heels and instep, flexible soles, and plenty of length and width for the toes. The clothing should be patterned to allow the weight to fall on the shoulders and to stay on without any of the shoulder contortions which shoulder straps sometimes necessitate. There should be no elastic bands at the waist and no round garters at the knee.

Clothing to promote self-help. The clothing should be designed with a view to promoting self-help. In the first place, many accidents can be prevented if the dress or suit is free from flying loops, ties and bows which may catch on protruding corners as the child runs past. Sashes and belts which come unfastened and trail on the floor are the cause of many trippings and tumbles. If the child is expected to dress and undress himself, the process will be greatly facilitated by keeping the clothing simple, perhaps down to a union suit with garters attached, shoes and stockings and a one-piece play suit. Petticoats, for example, are not needed if bloomers are worn. All openings in the child's clothing should be large enough to go on easily. Tight bands at neck, waist, and knee are bad from the hygienic point of view; they are also bad from the point of view of self-help. It is

hard for the child to adjust a tight knee band, for example, so that it is at all comfortable. A tight neckband in dress or sweater may get caught on the head and may frighten the child badly, if he is also unable to get it off again. Plackets in the front of the costume are much easier for the child to manipulate than those in other positions.

Raglan sleeves add much to the simplicity of the costume. They are more comfortable for the child and allow him to grow without any binding about the arms and shoulders.

Fastenings on children's clothing should be as few as possible and these few should be kept in good repair. Buttons are easier for the child to manipulate than other types of fastenings. The button should be large enough for the child to handle easily. It should be placed where it can be seen by the child, should be sewed on firmly and with a long shank. Even then the button is useless unless it is provided with a firmly made and proper size buttonhole. Hooks and eyes are hard for the child to fasten and hooks and thread loops are still more difficult. A fairly large snapper may be fastened by the older nursery school children, but care must be taken in laundering, for a bent snapper is worse than no fastening at all. Zippers work well in the soft material of leggings or dresses, but are too stiff for the young child when used in galoshes. Safety pins should never be used for children of this age. They are hard to fasten, come undone easily and then prick the child, and there is always the chance that the child will put a safety pin in his mouth for one reason or another and then sneeze and swallow it. Unusual closings such as loops, vests, flies, etc., should be avoided.

There are many other ways in which the child may be helped to help himself in dressing and undressing. Bloomers and trousers should be designed with long plackets and easy fastenings to make going to the toilet a simple process. Elastics should be kept fresh so that they actually support the stockings without too great pull on the shoulders. Shoestrings should be supplied with tips and should be long enough to tie easily. Leggings are best when knit, poorest when closed by a long row of small buttons and stretched buttonholes. Rubbers and galoshes are more easily adjusted when they are large in comparison with the size of the shoes. Mittens are most satisfactory when they are knit. Gloves are too cold and leather mittens frequently stiffen when wet until they are most unwieldy. Whatever the kind of mittens selected, they should be attached to the coat or sweater in some way. Most satisfactory is the scheme of fastening the mittens to the ends of a tape or string which passes across the shoulders and down the sleeves.

Suggested costumes. The actual costumes worn by nursery school children vary enormously even in a fairly homogeneous group. It is not unusual to find two children playing side by side, one dressed in a thin silk combination of shirt and bloomers, muslin slip and sleeveless muslin dress; the other dressed in a union suit, white cotton bloomers, a second pair of bloomers matching the dress, a heavy petticoat, and a long-sleeved heavy cotton dress. On the same day in one school a two-year-old girl appeared in a cotton band, a double-breasted wool shirt, long-legged wool drawers, a cotton garter waist, long wool stockings, an outing flannel petticoat, cotton dress and bloomers when a three-year-old boy wore a cotton union suit with short legs and short sleeves, long čotton stockings, cotton waist and cotton trousers.

The costume which at least some nursery school teachers prefer for winter in a room whose temperature is kept at about 66 degrees is: a union suit of some warm knitted material, fleece-lined cotton or a wool mixture, with long

legs and elbow length sleeves, long cotton stockings, high laced shoes to keep the ankles warm when the child goes out of doors and to reduce the likelihood of the shoes being removed, and a play suit, ordinary suit or dress with bloomers. For outdoor wear in extremely cold weather the young child needs warm, preferably wool-lined, leggings and jacket or a complete one- or two-piece play suit, galoshes, knitted mittens and a cap which protects the neck and throat. The heavy overcoats frequently sold for young boys are much too stiff and awkward for use by children of nursery school age.

The costume for the warm sunny days of summer should be as light in weight and as pervious to sun's rays as possible. The head and eyes should be shielded with a lightweight, ventilated hat; the feet may well be bare if the ground is reasonably clean and free from glass and nails; and the rest of the costume limited to a one-piece suit with short legs, no sleeves and of fairly transparent material.

The responsibility for the children's clothes which is expected from the nursery school varies considerably. A few schools of the social service type provide the costume which the child is expected to wear. In such a school the child removes his home clothing upon arrival at school and dons a smock or play suit which is kept for school use only. Such a plan has the advantage of making the children look clean and more like each other, thus saving a few very poorly dressed children the embarrassment which may come from outgrown or ragged clothing. It has certain disadvantages. In the first place, there is considerable expense connected with providing the clothing and having it laundered. In the second place, there is the problem of changing the weight of clothing which the child ordinarily wears. In the third place, there is the risk of pauperizing the family by teaching them to expect the school to assume entire responsibility

for the child. It is possible in schools which draw their children from families in better financial position to ask the families to provide a certain type of garment, but there seems to be no great advantage in dressing the children in any sort of uniform. As far as possible, the child's attention should be kept off his clothes.

Any school should expect the parents to supply extra clothing for certain emergencies. The child who is not yet wholly trained in bladder control will need a complete extra outfit at school. Other children will need extra sweaters for cold or windy days, and aprons for use in working with clay and paints.

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CHAPTER XI

NURSERY SCHOOL RECORDS

DIFFERENT nursery schools vary enormously in the number and kind of records which are made and also in the use to which such records are put. If records are stored away in an inaccessible place and if teachers and other workers never refer to them, their only value is in encouraging the recorder to make accurate observations. If, however, the records are consulted with ease, they may be of great value. After a first visit to a nursery school, a person interested in child development commented, "I could write a whole book on what I have seen this morning!" Most visitors are not quite so thrilled over a single visit but even a fairly casual observer must be impressed with the valuable material on children which is lost every day simply because it does not get written down and cannot possibly be remembered in detail. Over and over again the nursery school teacher will wish she could remember "what happened the first time Robert was fed liver" or "when Mary began to show fear of dogs" or "what Frank's mother said about his early impressions of school." It is impossible to know just what records will be most wanted in the days to come, but we can at least write down the events which seem at the time most important.

Records for the parent. Some nursery school records may be made for the purpose of keeping the parent informed as to the child's condition and behavior. The school is under an obligation to report to the parent the gross results of

medical examinations, such as a general statement as to the child's physical condition, his height, his weight, and the presence of remediable defects such as diseased tonsils or carious teeth. Other records kept at the school such as the length of the nap, the keenness of the appetite and the amount of food eaten will be of assistance to the intelligent mother. Records of bowel movements occurring during the school day should be sent home with the child each night. At least a general report on mental tests given to the child may be sent to the parents. Probably the exact I.Q. obtained on any one test should be sent to no one except school authorities or interested agencies. The mother seldom has had sufficient training in mental testing to give her an understanding of and a scientific attitude toward the I.Q. of her own child, or enough experience with the I.Q.'s at the preschool age to convince her of the great variations in every direction which are the rule rather than the exception. She cannot but feel if Johnny rates with an I.Q. of 120 and Bobby with one of only 115 that Johnny is definitely superior and no amount of explaining will convince her that on a future test the positions of the two children may very likely be reversed. General reports on the child's social behavior and progress in eliminating undesirable habits may also be made to the parents. In general, however, the detailed records which the nursery school makes should not be accessible to the parent, and above all they should not be accessible to parents of other children.

Records for the teacher. Good records help the teacher in understanding and in improving her methods of handling the individual child. If the teacher refers constantly to the earlier records, she will no longer guess but will know when a certain child is improving and when a different method should be tried. Guesses and general impressions are frequently faulty. A mother was asked to keep a record of her

child's sleep for a week. When the record was sent in, it was accompanied by a note to the effect that the child's sleep had been greatly disturbed because the grandmother had come for a visit and the child had had to sleep in the bed with her. In view of this unusual condition, the mother felt that the record was unfair to the child and the following week when she reported home conditions as "normal" again, she sent in a second record and asked that it be substituted for the earlier one. When the two records were compared it was found that the child slept slightly less at night the week of the grandmother's visit, but he also slept longer in the daytime, so that when total sleep for the twenty-four hour period was calculated, he averaged actually eleven minutes more sleep per day on the week of the visit. In like fashion the teacher will find that unless she keeps actual records and compares them, she will be at fault in following her personal opinion or "hunch." The records which will probably be of greatest value to the teacher are ones of the physical and mental examinations, records of the child's home situation, and careful records of habit training and of behavior difficulties at school. In recording problem situations, the record should state the apparent cause of the difficulty, the course of the reaction, the treatment to which the child was subjected and the manner in which the undesirable activity was dissipated.

The records may also be used to help the teacher in the guidance of other children. This will ordinarily be accomplished by the compilation of much data on individual children or by the recording of group activities, friendships, common interests and the like.

Records for other workers. The individual records are of interest chiefly to the parent and to the teacher, but they may be valuable to the teachers or social workers who come in contact with the children after they leave the nursery

school. Suppose, for example, that a child has been a serious behavior problem in the nursery school but that after three vears the teachers have discovered certain fundamental attitudes in the child and certain methods of handling which are most likely to have desirable results. Such information may save the kindergarten teacher many weeks of worry and much insubordination in her room. It is not unusual for the presence or absence of such information to be the determining factor in the adjustment of the child to the public school situation. Other records which may be of value to the kindergarten teacher or to the research worker are the results of mental examinations, the family history, the disease record of the child, his attendance record at the school, a record of his play interests, end-products, evidence of particular interests or hobbies, the formation or dissolution of undesirable habits, and so on. For general information about the preschool child, the records of all sorts of behavior in school and the results of all sorts of research investigations have untold value.

Records of attendance. An example of the value of one of the simplest types of records kept is the attendance record. A number of papers have been published giving data on the attendance of children at nursery schools, and from this a person contemplating the founding of a new school may calculate fairly readily the probable percentage of the total enrollment which may be expected to be at school on any day. If, for example, the enrollment is thirty-six and it is found in a school of the same size in the same approximate locality with a similar group of children there have been not more than thirty children present on 96 per cent of the school days, then the new school need provide teachers for only thirty children, instead of for thirty-six.

The attendance at the school may be kept in an attendance book, or on some sort of attendance chart. The record

should, in either event, be kept for individual children, instead of noting merely the total number of children present on that date. The briefest records state simply whether or not each individual child was or was not in school on each date. More detailed records may signify the reason for the absences by adopting symbols for such common occurrences as cold, cough, temperature above normal, discharging eyes or ears, some contagious disease in the child himself, quarantine for some other member of the family, child away from home, etc. Still more detailed records may give more accurate information, such as:

Records of physical condition. Since the treatment of the child should be modified in accordance with his physical condition and since the preschool age is one when defects may be remedied with comparative ease and when slight changes in diet and routine are of great effect, it follows that both the parent and the teacher should be familiar with the child's physical condition. The physical examination may be made by the family doctor or by a physician connected with the school, but whoever the physician is, he should be familiar with the child of preschool age. The report of the examination, if it is to be of use to the average parent or teacher, should be in simple, nontechnical terms and should embody any recommendations which the doctor desires to make. If research is being conducted which needs more exact information on the child's condition more detailed records may be taken at stated intervals.

A short medical history will probably be recorded in connection with even a brief physical examination. A detailed history of the child's health and development will be of great value to the pediatrician who is following the child through a term of years, but a brief statement as to the child's previous health, incidence of contagious diseases, and particularly a record of the inoculations against contagious diseases which have been given, will be of significance for the teacher. The teacher should know also how frequently the child has colds and should be given any information which suggests points to watch for in that particular child. Records of the illnesses of the child during the school year may be recorded on the medical history blank or on the attendance chart or in some other special place.

Special examinations are valuable as routine procedure and are vital in certain cases. Deficiencies in vision and hearing are particularly important and in any case where there is a suspicion of defect the pediatrician should make a diagnosis. Examinations of the teeth should be made for all children and the children referred to a dentist when necessary. Growth records, particularly of height and weight, are good indices of nutrition. Posture records, including changes in the curve of the back, general position when standing or sitting, footprints and so on may be taken

Records of motor development are interesting and may explain certain abilities and disabilities which appear in the children's play. Such records may show the child's coördination in use of hands or feet, ability to balance, to trace accurately, to walk in a straight line and so on.

Records of mental examinations. Most schools will have mental tests made at regular intervals, usually once or twice a year. The report from these may state simply the I.Q. As we have suggested before, this I.Q. should be for the information of the teacher and not the parent. A psychologist with wider experience than the routine tester will be able to draw further significant conclusions from the examination. Other tests may be made in many schools. The nonlanguage performance tests frequently are of great significance in the case of certain children. Tests of special abilities may be made on such subjects as musical ability, mechanical ability, and interest and efficiency with puzzles. Records of language development and articulation will show the development or lack of development in a particular child much more clearly than can be remembered by the teacher.

Records of behavior at school. The brunt of records of behavior at school will naturally fall on the teachers, though they may be of value to a great many people. The school records kept vary widely from one school to another. In some schools the teachers are expected to make notes fairly steadily through the day and then to make weekly or monthly summaries. Such a procedure, of course, takes much time and can be attempted only in a research center where the number of children under the control of any one teacher is very small.

The number of items to be covered in a record of sleep will depend upon the use to which the record is put. The simpler records may be merely a statement as to how many children slept or as to whether or not each child slept on each day. A somewhat more detailed record will answer the requirements of most schools by giving for each child the time when he got into bed, the time at which he fell asleep, and the time at which he woke. With some children a record as to whether or not the bed was wet is important. All such points as how restless, how much distracted by others, how disturbing to others, etc., may aid in the arrangement of children during the nap hour. The sleep record, like many other records, may be kept not every day but at stated

intervals, say one week in every month. Such a scattered record will give a satisfactory picture of the child's progress.

The luncheon record may likewise be of almost any degree of refinement. The simplest kind is probably a record of the general appetite shown by each child. Other points sometimes included are: the total time spent at the table, the amount of each kind of food which was consumed, whether the food was eaten with relish, as a matter of course, disliked or refused, whether urgings were necessary, whether the child had to be helped to finish the meal, what the attitude was toward other children, the teacher, and visitors, the approximate size of bites taken, the amount of physical activity and conversation during the meal. If a child is a feeding problem in any way, the records should include detailed descriptions of methods used and their results.

Records of the social attitudes of the child are frequently kept and are of considerable value to the person studying that particular child or children in general. Such a record may include for each child: his attitude toward the other children, as well as their attitude toward him, and evidence of independence, leadership, followership, self-help, tact, coöperation, and many other traits. Most of these records are largely subjective but one which is objective is a record of social groupings and friendships among the children.

Records of emotional upsets occurring at school will help the teacher to find the most frequent causes for such outbursts. Only by knowing the most common causes, the general development of the outburst and the course of its dissipation can the teacher discover the treatment which is most effective for each individual child.

Many nursery schools expect the teachers or students in training to keep some sort of "personality" study of the various children. This usually is an attempt to bring together in an organized plan a mass of detailed information that will give a rather complete picture of the child's personality, habits and abilities. If such studies are merely written reports of the adult's impressions of the child they will be of little or no value. If they are answers to specific questions, they may be of great value, particularly if the recorder is given a definite scale against which she can check each child and so avoid the dilemma of two observers using the same term to express different degrees of accomplishment. If one observer makes a rating scale for herself using six items such as excellent, very good, good, fair, poor, very poor, while a second observer uses a five-step scale of very good, good, average, poor, very poor, it is obvious that the adjectives in the two scales are not comparable. Where a fairly reliable scale has been worked out and the scoring is done by experienced people who are well acquainted with the individual children, we have in the personality study a basis for comparing one child with another or with a group of children, and of comparing the judgments of different adults upon the same child. However, to have any worthwhile results, the personality study should be very carefully worked out. Otherwise the results will probably be misleading to the untrained student and most unsatisfactory to the trained worker. Another value in records of this type is the training they give to teachers and students in making careful exact observations. Many student observers waste their time because they do not know what to look for or how to observe nursery school activities intelligently. Definite questions requiring specific answers tell the recorder what to look for and make her observations more accurate. Different nursery schools keep a great variety of such records, such as a record of habits of nursery school children and diary records of activities of individual nursery school children.

Records of the child at home. The teachers are much better equipped to train the child skillfully at school if they have a pretty clear understanding of the home situation. Over and over again a teacher will say, "I feel quite differently toward that child since I have seen him in the home situation and have talked with his mother." The school needs to know the number of members in the family, particularly whether or not there are grandparents and other children. The social and material home environment will explain many of the child's reactions, and only through fairly intimate acquaintance with the family can many of the child's problems be understood. Information about the family, the methods of control used, the child's hours of sleep, the food liked and eaten, may be easily obtained when the child first enters school, and should probably be obtained again at the beginning of each succeeding school year.

Contacts with the home may be recorded through some form of written record of home visits made by the teacher or nurse, school visits made by the parents, telephone conversations, and correspondence.

Some schools attempt to keep in touch with the children after they leave the school, and so ask for reports from the parents and from the teachers in the upper grades. Since such reports come from many different persons, there is a great advantage in keeping them as objective as possible and again giving the recorder a definite scale from which to grade the child.

Annual or semiannual reports. The teacher may not have time to keep detailed daily or even weekly reports, but many schools expect some sort of yearly or half-yearly summary. Such a report is more accurate if the teacher understands exactly what is wanted and is much less burdensome if many of the questions may be answered by

checking or underlining. A suggestive outline for such a report is given below:

•	
	TEACHER'S ANNUAL REPORT OF
the las	Note: This report is meant to outline the child's school record on a date specified. Disregard characteristics not shown within the t month. Make no allowance for age or sex in any of the comparisons.
1.	Date
	possible days. Reasons for absence.
3.	Total attendance to date days. Toilet habits. (Underline) Unable to state need, sometimes
	states need but unreliable, needs complete assistance with clothing, can unbutton but not button, entirely independent. Bed-wetting: during nap, never, occasionally, usually.
4.	Special toilet problems
	Commonly refuses (list articles) Dislikes but eats
	Eats rapidly, with average speed, slowly.
	At table, pays much attention to others in room, takes reasonable interest in others, ignores others.
5.	Special eating problems
	Usual length of nap about
6.	Special nap problems
	without help, practically independent. Dressing difficulties chiefly due to unwillingness, inability, lack of training, type of garment.
	Notes:
7.	School behavior. Is total amount of time and attention required by this child very much greater than, somewhat greater than,

about the same as, somewhat less than, very much less than that of the average child in the school? Is child much, somewhat, little interested in other children? Name particular school friends, if any
Is he much, somewhat, little interested in visitors? Underline the types of activity which he particularly enjoys: Gymnasium apparatus, sand, blocks, doll play, table play, imitation of adult activities, stories, music, rhythms, out- door play, pets, organized games, coöperative play, workbench, drawings and paintings, construction, clay, other special inter- ests (specify)
Is he very enthusiastic in his play, does he show usual amount of interest, require special urging or stimulation to play? Does he usually lead, take his fair turn, follow? Does he attempt to get his own way in the group through bullying, ingenious ideas, making concessions, bringing things from home, "tattling," other devices (specify)
Mark each of the following behavior problems to indicate the frequency with which it is exhibited by this child as follows. F = frequently, O = occasionally, N = never. Temper tantrums Negativism Hyperactivity Hypoactivity Teasing Being teased Thumb-sucking Irritability Quarrelsomeness Selfishness Handling genitals Fears (specify) Mannerisms (specify)
Undesirable language (specify profanity, obscenity, etc.)

	NURSERY SCHOOL RECORDS	197
	Feeding problems (specify) Toilet problems (specify) Speech defects (specify) Sex problems (specify) Unhappiness Apparent cause	
8.	Others (specify)	• • • •
	Mother visits school frequently, occasionally, never Mother discusses child with teacher, frequently, occasion never	ally,
	Mother seems grateful to, satisfied with, critical of the se	hool.

CHAPTER XII

THE NURSERY SCHOOL AND THE HOME

THE nursery school is a supplement to the home, not a substitute for it. Both school and home are working for the same end: the best possible conditions for the child's growth and development. Each environment contributes advantages which the other cannot offer so well or so easily. There are few homes so perfect that the child might not benefit from contact with a good nursery school.

Advantages of the home. The home has many contributions to make which are beyond the province of the nursery school. No school can provide the social heritage, the ideals. the traditions, and the religious beliefs of the family. Neither can the school give the family's sense of unity and security. the feeling that here is a group which always has belonged together and always will belong together, and in which the child has his own unique place. The continual, day after day and year after year, dependence upon and association with the same small group of persons cannot be given by any school. The home offers also the companionship of persons of various ages. In many a family group the children are frequently so interested in the conversation among the adults that they absolutely refuse to "go off and play." Such contacts, with the resulting increase in information and broadening of points of view are, of course, impractical in the nursery school situation. The nursery school tries to show affection to all the children, but this is not the personal affection found in the family. In a group of twenty

or thirty children, the individual cannot be so important as he is at home. The home offers an opportunity for sharing in home duties and activities which is beyond the compass of the school. The school substitutes for "helping mother cook or clean house" are feeble imitations of the real thing.

Advantages of the school. The nursery school, on the other hand, may contribute much which most homes cannot offer. The school is an environment planned solely for the child. The furnishings and equipment are suited to his physical needs and are planned to stimulate self-help and self-confidence. The ordinary home must be conducted from the point of view of the whole family, and since people are adults and adolescents for much longer periods than they are small children, it is only natural that the homes should make little provision for their youngest members. In these days of apartments, a child may consider himself fortunate if he has a room or corner to himself with a table and chair of the correct size. Besides an unusually favorable environment, the school provides exceptionally good physical care. Few homes furnish daily medical inspection of the child and his playmates; in few homes is the menu planned by a dietitian; and in few homes are the child's activities supervised by a professionally trained teacher. The nursery school provides further a large variety of desirable play material. Some of this is impractical for the average home either because of its cost or because, as in the case of sand, it cannot be used by the child without possible injury to the furnishings of the rest of the house. Much of it is material which the home could provide but which is never thought of as play material. The school offers a calm, unemotional atmosphere in which the teachers assume a detached attitude very difficult for the mother to acquire. The contribution of the school which frequently makes the strongest appeal to mothers is the opportunity for associa-

tion with other children of the same age on a strictly impartial plane. Such association may be expected to result in the acquisition of fundamental social attitudes, particularly the recognition of the rights of others. The school may also improve the child's attitude toward his own home. Frequently the child who spends most of the day at a nursery school shows an added appreciation of his home when he returns. He has learned the possibilities of play material at school and when he gets home he attacks his own things from a new point of view. More than this when he gets home he is greeted by a mother who at the close of the day is much less fatigued than when she has had the steady responsibility for the child in addition to her other duties. Thus, when the child is most fatigued at the end of the afternoon, he is cared for by a mother who is less fatigued. They have both had experiences during the day which interest the other and the close of the day is ordinarily much happier than when they are two fatigued persons who have been together all day.

The nursery school may contribute much which some of the homes do not. In many instances the nursery school is a true social service center. Few charities can have wider or more lasting influence than one which takes the very young children from the ignorant families in the slums of the big cities and provides those children each day with clean clothes, fresh air, sunshine, good food, medical attention, and an environment which should encourage desirable fundamental habits. Working mothers also need a place where they may leave their young children for the day. Such a place should combine the characteristics of the old day nursery and the modern nursery school. The problem of such a school is complicated by the necessity of providing for ill children who cannot be sent home until their mother is through working. The advantages of the nursery school

are not limited to very poor or working mothers. Many a mother who does not work outside the home is kept so busy with her housework and with the care of younger brothers and sisters that she is unable to guide her preschool child's occupations to the extent which she may desire. Such a mother accepts only too thankfully the opportunity to send her child to some nursery school where she knows he will receive excellent care at the hands of trained workers. There are, moreover, the very wealthy mothers who have no time or inclination for the personal care of their young children. Many of them prefer a carefully conducted private nursery school to the best trained nursemaids.

Relationship between school and parents. The relationship between the nursery school and the parents of its children is doubtless closest in the coöperative nursery schools mentioned in an earlier chapter. Here the mother is actually a member of the staff, under the supervision and direction of a trained teacher. Under these circumstances the mother learns to see her own child as the nursery school teacher sees him and she is able to make more intelligent comparisons between him and other children of the same age. Through personal acquaintance with the aims and problems of the nursery school, the mother develops a more sympathetic understanding of the situation and of her child than is otherwise possible. Furthermore, she knows exactly what he has been doing during the day and so should be better able to plan for his time spent at home.

Other schools keep in fairly close touch with the homes through observation of the school by the parent. Every good nursery school will welcome visits from the parents though the exact arrangement for the visits varies from one school to another. In some, the parents are encouraged to drop in informally; in some they are requested to make regular appointments; and in still others the parents are

given regular assignments for all day observation. Frequently the school will have definite suggestions to make in regard to the most desirable behavior in visitors to the school. In the University of Minnesota, for example, every visitor is given a mimeographed list of requests as follows:

GENERAL DIRECTIONS FOR VISITORS TO THE NURSERY SCHOOL

Since very young children are easily distracted, it is necessary to request visitors to observe certain precautions.

- 1. Leave umbrellas, wraps, etc., on the first floor.
- 2. Visitors are free to observe outdoor play, but should not interfere with the play.
- 3. When observing inside, enter and leave the room as quietly and unobtrusively as possible, so as not to disturb any activities.
 - 4. Avoid rooms in which there are already three visitors.
 - 5. Remain seated during any group activity.
 - 6. Do not stand in doorways nor on the stairway.
- 7. Visitors should give no indication of amusement nor should they make comments upon the children's behavior.
- 8. Do not initiate conversation with children. If they address you answer as briefly and unconcernedly as possible.
- 9. Do not talk to other observers or to the teachers. If you have questions go to room 100.

There are many advantages resulting from parents' visits. Although they are not actually controlling the child in the situation, they do see him in a group and compare him with others. They learn what skills and habits can be expected of a child of a given age and development. Their judgment as to special abilities and disabilities is much improved when they have an actual model with which to compare their child. If their visits are at regular intervals, perhaps once a month, they may be able to follow the progress of general development and habit training in individual children.

The parents see also equipment in the nursery school which may be duplicated for the home. The toys used at

home are usually selected from local stores and frequently express the interest of a fond aunt or grandfather instead of that of the child himself. A nursery school will gather its material from many places, sometimes hunting for several years for just the kind of a train or a puzzle that is desired. Some of the school equipment will be too bulky or too expensive for the average home, but if the parents understand the principles of the good material supplied by the school, they may apply them to toys which are within their means and small enough to be used at home. The chief points which the nursery school equipment can teach the parents are that play material should be durable, hygienic, simple, capable of being used in many ways, interesting to the child, and suited to his interests and abilities.

From a visit to the nursery school with the opportunity of asking questions afterwards, the mother and father may learn much that will help them in training their own children in various fundamental habits. They will see teachers handling a number of behavior problems. If a mother sees some other child throw a temper tantrum, her notions of temper tantrums will be quite different than if she sees them all from the point of view of a devoted mother who is distraught at the actions of her son. The parents will perhaps see many situations which are problems at home handled smoothly at school. They may be impressed with the successful methods used by the teachers and try to improve their own methods of control.

Another means of keeping a close relationship between home and school is by providing for group conferences with the parents. In some schools the parents are expected to enroll in a child-study class. Such a group needs a trained leader unless it is to deteriorate into a disorganized exchange of anecdotes or into a snarl of questions about points outside the scope of the immediate lesson. The study groups should be conducted preferably by some one who knows the nursery school children well, but who is at the same time able to keep the discussion as general as possible. If illustrative material is drawn from the school and the children named in the discussion, the leader runs a great risk of antagonizing some mother or of giving another an exaggerated opinion of her child. In some schools, the study groups are organized by the parents themselves and each one may be responsible for a paper or a report. Such an organization is usually out of the question or very difficult to handle tactfully if the mothers represent widely varying degrees of education and knowledge. Other schools do not arrange such detailed programs but provide periodically for parents' meetings in which nursery school problems may be discussed.

Whether or not a given school conducts group conferences for study and discussion, every school will carry on a certain number of individual conferences with the parents. This may be done by having a teacher well acquainted with the child visit the home. Unless the mother comes fairly regularly to the school, these visits to the home may well be made part of the regular routine of the school. Two or three visits a year may be all that seem to be needed in the case of some families while other cases will require more. Incidental visits to the home may be made whenever any problem arises where the mother's cooperation is needed or where further information from the home on some topic is desired. In some schools home visits are continued for a number of years after the child has left the school. In these cases there is usually specific information regarding the child's development which the school wants to record.

Other individual conferences occur when a parent comes to the school to obtain some information or to discuss some problem. Such conferences are usually requested by the parent. At such a time the parent should be interviewed by some qualified teacher who knows the child in question and who has had considerable experience. Frequently this duty will fall upon the head teacher. Sometimes the mother's questions can best be answered by those in charge of the physical care of the child or by the person who gives mental examinations.

Still another means of keeping in touch with the home is through written reports sent to the parents at regular or irregular intervals. Reports on bowel movements occurring at school should, of course, be sent each night. Other reports which may come at monthly or six-weekly intervals are those giving the last height or weight of the child, the average length of nap which he is taking, the appetite which he exhibits at lunch, and some report on his general behavior. Other reports which may be made whenever convenient or desired are reports on physical examinations, dental examinations, mental examinations, records of articulation, and the like.

The school and other parents. The nursery school may be a help to other parents besides those having children in the school. It may, for example, act as an observation center either in connection with some course in child care and training or for the incidental observation of an occasional visit. The school may also offer conferences for parents in general. These are ordinarily conducted by some person with nursery school experience who is also trained in parental education. Generally speaking, the nursery school teachers themselves have neither time nor energy for such outside duties. The nursery school may also from time to time offer exhibits which are open to the general public or to specified groups of interested parents. Such exhibits may be concerned with play materials, products made by children of different ages, desirable clothing, and

other related topics. Finally, the nursery school may offer information and suggestions through printed matter, such as free or pay correspondence courses, and extension leaflets giving the results of investigations.

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CHAPTER XIII

THE NURSERY SCHOOL AND THE KINDERGARTEN

THE nursery school, as we have seen, is a comparatively recent addition to the array of educational institutions in America. It is still in the formative stage, still in the stage where any individual feels free to gather a group of young children together and call the group a "nursery school." No one can know at the present time what the future development of the nursery school will be. Up to the present time most nursery schools have been organized and financed by private funds and have been associated with some foundation or some institution of higher learning. Although they have been based on the theory that they must provide an excellent environment for the children, the emphasis of many schools has been on research work and on teacher training. Nursery schools have not been generally accepted as part of the public school system. Perhaps they never will be so recognized. As most nursery schools are organized at present, they are far too expensive to be absorbed by the public schools without a major revision of the school budget. Indeed, although those connected with nursery schools are convinced of their usefulness, it is not yet proven that every child in the country would benefit by attendance. In particular, we have no evidence at all as to the age of entrance into a nursery school which is most to be desired. It may very well be that the nursery schools as now existing are most suitable for children of three, or some other age group. Until these matters are determined a public school system would be rash, indeed, which attempted to set up a compulsory nursery school as a prerequisite for entrance to the kindergarten.

The kindergarten, on the other hand, has won a recognized place in the public school systems of most large cities. It has proven itself valuable and practical as an educational institution. The kindergarten had its beginnings in private enterprise, but it is now largely supported by public funds. Ten years ago 85 per cent of the kindergartens reported to the commissioner of education were public schools, and doubtless the percentage is still larger to-day. The kindergarten started from the educational philosophy of Froebel, was colored to some extent by the theory and practice of Montessori and has now in a large part thrown off the formal didactics of both those systems and has emerged as an American school with a definite educational theory, methods, and fairly definitely determined set of materials. As the kindergarten and the early grades have become better acquainted with each other, the grades have gradually adopted some of the principles used in the kindergarten and the kindergarten has absorbed to some extent the point of view of the grades so that now there is no difficult transition for the child passing from the kindergarten into first grade. The unification has been so complete in some schools that the kindergarten has lost its distinctive name and has become merely the "preprimary" room.

Influence of kindergarten on nursery school. Until the last few years the children entering the kindergarten all came directly from the home. Recently in larger and larger numbers (though still almost negligible where the whole group is concerned) the children are coming with varying amounts of nursery school experience. The nursery schools from which they come have not risen in response to any demand from the kindergarten. If they had, the problem of

the relationship between the two schools would be very simple; the kindergarten would simply have worked out exactly what it expected children to gain in the nursery school and the nursery school curriculum would be planned with those requirements in mind. But the development came from outside sources and the kindergarten is in the curious position of unintentionally influencing, to an unknown extent and by a round-about method, an undetermined number of children who will later enter the kindergarten itself.

We have said that although the nursery school did not spring from the kindergarten, nevertheless it has been greatly influenced by that institution. This influence has been shown in several ways. It was only natural that when starting an institution for very young children, the founders should take as their copy the institution which came nearest to being what they wanted. Much of the educational philosophy of the nursery school has been borrowed from the pioneers of the kindergarten movement. Pestalozzi, Froebel, Montessori, John Dewey and many others have given us standards of early education which are not limited in applicability to the narrow range of ages represented in the kindergarten. Of late years, the nursery school has modified and supplemented the ideas borrowed from the kindergarten but the foundation has remained the same. The nursery school has not stopped at educational theory but has taken over much of the actual kindergarten material and equipment. More than this, most of the early nursery school teachers who have had so much to do with the development of the movement have been teachers with kindergarten training and experience. In a few cases, to be sure, teachers have been imported from the English nursery schools, but these have been but a small bit of leaven for the whole lump. (It is only fair to say that the nursery school teachers who are being trained at the present time are in general girls who have been brought up in the atmosphere of the American nursery school.) Under such conditions, with educational philosophy, materials and teachers all borrowed from the kindergarten it is not surprising to find many nursery schools which are merely kindergartens modified somewhat to meet the needs of the younger child. The kindergarten is, then, faced with the question of what to do with children who have already had several years of somewhat modified kindergarten work.

Distinctions between nursery school and kindergarten. Let us consider just what distinguishes the nursery school from the kindergarten. In the first place, the nursery school admits younger children, usually from age two upward; whereas the kindergarten admits children of four or of five, depending on the policy of the particular city. The nursery school often operates on a full-day schedule, and thus adds to the type of training offered in the ordinary school, training in eating and in sleeping habits. The nursery school keeps up a closer contact with the home as a result of the fact that the child is younger and more dependent upon adults. He is dependent in that he cannot come to school by himself, in that he frequently is not completely trained for toilet habits, in that he often cannot wholly dress himself, and so on. The nursery school, more than the kindergarten, needs to stress the physical care and physical development of the child. The earlier the defects are remedied, the better it is for the child, and the nursery school gets the child at the age when the rewards for health care and training are greatest. The programs of the two schools differ particularly in the emphasis placed on a product, on willingness to stick to a job until it is finished and on group activities and coöperation. The nursery school requires ordinarily a more highly trained teacher than does the kindergarten. The efficient nursery school teacher should have a basic knowledge of psychology, of nutrition, of sociology, and of the detection and treatment of contagious diseases in addition to her knowledge and experience in handling and teaching young children. So far there is no conflict or overlapping between the two schools.

Problems of adjustment between nursery school and kindergarten. One of the most common misunderstandings and problems arises when the kindergarten fails to realize that certain of its functions are not inherent in the kindergarten itself but are the functions of any school which is the first school which the child attends. Whether the child enters the school system in a nursery school or in the fifth grade, the teacher to whom he is assigned will be the one who makes the break between home and school. She will be the one who introduces the child to the social group, the one who begins the task of replacing bad attitudes and habits with useful ones. However these bad attitudes are initiated, every teacher knows, whether she be kindergarten teacher or high-school teacher, that certain of her pupils have habits which should receive attention. The first year a child attends a public school is often the time of the first examination for remediable physical defects. All these duties are not duties solely of the kindergarten, but are primarily the duties of the first school which the child enters.

Nursery school experience, from the point of view of the kindergartner, results at present, and will continue for some time to result in the problem of adjusting a few children with previous group training to a class of other children without such training. The nursery school trained child, for example, enters the kindergarten already accustomed to the group. A father who took his third child to kindergarten the first day remarked, "You would know this boy

had been at nursery school. When I brought my other children to kindergarten, they hung back and had to be urged to join the group. I had to stay around for half an hour or so until they got a little acquainted. This one marched in to the cloak room and said, 'I guess I'll take this hook for mine. You can go home now, Dad.'" Such a child has had not only social contacts but has had also two or three years of experience with stories, songs and activities not dissimilar to those of the kindergarten. The result is that he does not need the adjustment to the group which occupies so much of the early part of the year in the kindergarten, and he may be distinctly bored with the activities which are offered to him. In a kindergarten where all the children have had nursery school experience the problem does not arise, but there is then merely the question of offering the children somewhat more advanced work in the light of their previous experience.

The problem of adjustment between the two schools is felt keenly by the nursery school as well as by the kindergarten. The conscientious nursery school teacher does her best not to overlap kindergarten work. She tries to keep the emphasis of her school on habit training, social adjustments, and freedom to use all sorts of materials for selfexpression. There is no difficulty with the younger children, but the children of four and a half, in a city which resolutely refuses to admit children to kindergarten before the sacred age of five, are a source of worry and sometimes trouble to the nursery school. Some institutions meet the problem by conducting their own kindergarten and arranging the personnel and the program of the two schools to avoid difficulties. Other nursery schools dodge the issue by dropping the children when they reach the age of four or four and a half. Such a procedure as the latter seems distinctly unfair to the child. If for two years a child has

known the enriched environment of a good nursery school, he may suffer all the more from being thrown on the city streets for a year before he is to be admitted into kindergarten.

Solution of the problem. The solution of the question of the relationship between nursery school and kindergarten seems to lie in that word which we hear so often of late, "unification." Kindergarten and nursery school teachers will have a keener and more sympathetic understanding of each other's problems if each has some experience in the other type of school. A year's work in the nursery school will remind the kindergarten teacher of what children are like the year before they come to kindergarten and will show her in what ways she may expect a nursery school trained child to differ from children who are leaving home for the first time. Similarly, a year's work in a kindergarten will give the nursery school teacher a good idea of what the children who leave her are going to find in their next school. If each school understands the curriculum of the other, definite efforts can be made to provide materials and use methods particularly suited to the age of the children concerned and so to avoid much undesirable overlapping. In a school system where nursery school and kindergarten are closely coördinated, it should be possible to admit an unusually mature child to kindergarten before the ordinary age limit, or else to give a definitely prekindergarten type of work during the latter part of the nursery school program. Such advancement should, of course, depend entirely on the development of the child. We cannot at present know whether attendance at nursery school should of itself constitute a reason for a half-year's advancement in the public schools. Whatever else is done, the kindergarten teacher should know exactly what nursery school training each child in her room has had. Perhaps

each child should bring to school a definite statement or report from the nursery school which he has attended.

The nursery school, as we have said repeatedly, is still in a formative state. The institution itself may be relied upon to check up on its methods and results as far as is possible. What most needs to be made is a definite comparison of children with and children without nursery school training in an effort to evaluate the work done by the nursery school. If the nursery school is to develop to its utmost possibilities, it needs, as well, much constructive criticism from interested persons outside of the school itself. The mother of a nursery school child who reports just what the school has done for her child-whether of good or ill—is not only helping the school deal more wisely with that particular child but is also helping the school formulate an educational policy. In a like way, the kindergarten teacher who states frankly the advantages and the disadvantages of nursery school training which are apparent to her is of vital assistance to the advance of a great movement.

INDEX

Abdomen, circumference of, 24. Accidents, protection from, 1, 17 et seq., 34, 41 et seq., 47. Aims, 1 et seq. Alabastine, 61. Anderson, J. E., 165. Animals, in stories, 112; live, 36 et seq., 55 ct seq.; toy, 48 et seq., 51, 57.Anorexia (sec Food problems). Appetite, 3, 19, 25, 141 et seq. Armstrong, E. M., 174 et seq. Attendance, 10, 13, 188 et seq. Baths, 125; (see also Equipment). Beds (see Sleeping room). Behavior problem nursery schools, 10. Behavior problems, 15, 164 et seq., 170 et seq.; anti-social, 168 et seq.; attention, 27, 75, 77, 97, 99; cating, 141 et seq., 161, 165; nail-biting, 166 et seq.; thumb-sucking, 8, 153 et seq., 166 et seq.; toilet, 125 et Bladder control, 116 et seq., 127 et seq., 183. Blood pressure, 24. Bones, development of, 24. Books, 62 et seq., 76, 80, 90; picture, 49, 62 et seq. Bowel control, 125 et seq., 186. Boynton, M. A., 148 et seq. Brain, development of, 24.

Bridges, K. M. B., 74. Brooks, J. E., 134 et seq. Building, 7, 12, 14, 34, 38 et seq. Bureau of Educational Research, New York City, 14, 53.

Chase Stockinette Doll, 54.
Chest, circumference, 24.
Children, introducing new, 159
et seq.; selection of, 6, 8, 12
et seq.

Circle (see Group activities). Clayton, C. B., 133 et seq.

Cleanliness, habits of, 118 et seq.; (see also Clothing and Toilet habits).

Clinic, 9. Clothing, 1, 9, 14, 18, 119 et seq.,

173 et seq.
Constructive material (see Play

materials).
Contagious disease, 1, 16 et seq.,
115, 141 et seq., 189 et seq.;

epidemics, 19. Control, methods of, 29, 90 et seq., 98 et seq., 108, 129 et seq., 144 et seq., 171; (see also specific behavior problems).

Conversation, 76 et seq., 79, 81 et seq., 87 et seq., 107 et seq., 140, 145, 163; (see also Language period).

Cook, responsibility, 19 ct seq. Coöperative nursery schools, 10 et seq., 16, 201.

Cotton, for clothing, 176 et seq. Curiosity, 32.

Day nurseries, 9, 13.

Dentist, 4, 190.

Dewey, John, 209.

Dietitian, responsibility, 19 et seq., 137, 199.

Dining room, 39 et seq., 44 et seq.

Disease (see Contagious disease). Doctor (see Pediatrician).

Dramatization, 27, 30, 95, 98, 102, 108 et seq.; (see also Imagination).

Dressing habits, 195; (see also Clothing).

Dunshee, M. E., 136.

Eating habits, 2, 39, 133 et seq., 140 et seq., 195, 210; (see also Food problems and Luncheon period).

Eliot, Abigail, 9.

Elimination, habits of (see Bladder control, Bowel control, and Toilet habits).

Emotional problems, 2, 28 et seq., 163 et seq., 192; affection, 28; anger, 28 et seq.; humor, 30, 112; jealousy, 29, 170; temper tantrums, 164 et seq., 168, 203. English nursery schools, 9, 14, 209.

Enuresis, 19, 129, 153.

Environment, 1 et seq., 90, 158, 199 et seq.

Equipment, 34 et seq., 157, 199; aprons, 120, 183; bibs, 44; blackboard, 40; brooms, 42, 58; canary, 56; chairs, 41; chalk, 62, 158; climbing bars, 51; clothes drier, 46; cupboards, 41; digging corner, 36; dishes

(see Dining room); drinking fountains, 45; easels, 61; erasers, 62; fence, 37; gate for stairs, 42; goldfish, 56; hand-kerchiefs, 45, 120 et seq.; ladders, 50; lockers, 38, 119 et seq., 157; medical, 46; piano, 76, 78, 90; scales, 46; screens, 39, 42, 55, 150 et seq.; tables, 41; thermometer, 42; thread, 62; victrola, 100 et seq.; wading pool, 59; water, 1, 133, 137. Exhibits, 205 et seq.

Face-washing, 123 et seq. Fatigue, 19 et seq., 90, 94, 141 et seq., 170, 200.

Fear, 29, 165, 170.

Fee (see Tuition).

Finger plays, 108 et seq.

Fire escape, 41 et seq.

Floor, requirements, 40.

Food problems, 1, 9, 13, 19, 69, 131 et seq.; calories, 131, 136; carbohydrates, 132; cod-liver oil, 71, 132 et seq.; fats, 131 et seq.; intolerance, 141 et seq.; mineral salts, 132; non-hunger, 25, 141 et seq.; protein, 131, 136 et seq.; vitamins, 131 et seq., 142.

Footprints, 24.

Foster, J. C., 165.

Free-play period, 14, 69 et seq., 90, 95, 106, 161.

Froebel, F., 208 et seq.

Furnishings, 40 et seq.; (see also Equipment).

Games, 31, 95, 101, 105. Garden, 35 et seq., 159. Gary, Indiana, investigation in, 133.

Genitals, handling of, 167 et seq.

Governesses, 4.
Grace at meals, 140.
Gray, G., 34, 38.
Group activities, 69 et seq., 93 et seq.; (see also Language period and Music period).

Habits (see specific habits).

Hair-combing, 120 et seq. Hand-washing, 124 et seq. Head, circumference, 24. Health (see Contagious disease and Sickness). Heart, development of, 24. Height, 17, 23 et seq.; (see also Records). High schools, nursery schools in, Home economics nursery schools, 8. Hull, B. I., 116. Hull, L. C., 116. Humidifiers, 42. Humidity, 1, 18, 151. Imagination, 1, 29 et seq., 49, 76 et seq., 84. Imitation, 26 et seq., 166, 170,

et seq., 84.

Imitation, 26 et seq., 166, 170, 199.

Independence, 2, 155 et seq., 162, 165, 179 et seq., 192, 199.

Information, acquisition of, 1, 28, 198.

Injuries (see Accidents).

Inspection, morning, 17, 39, 199.

Institute of Child Welfare, Berkcley, California, 134.

Intelligence quotient (I.Q.), 186, 190 et seq.

Johnson, Harriet M., 127 et seq. Jungle Gym Junior, 49.

Isolation room, 9, 39.

Kindergarten, 95 et seq., 188, 207 et seq. Kitchen, 40.

Langford, A. S., 135.
Language, 93, 106, 163, 191; conversation (see separate item); period, 96, 105 et seq., 163; vocabulary, 26 et seq., 107.
Leisure time, 158 et seq.
Lindbergh, Charles A., 27.
Linen, for clothing, 177.
Lowrey, L. G., 164.
Luncheon period, 14 et seq., 70 et seq., 139 et seq., 192.

McGill University Nursery School, 74. Masturbation (see Genitals).

Meals (see Food problems and Luncheon period).

Memory, development, 27 et seq. Mental development, 26 et seq., 190 et seq.

Mildred R. Wimpfheimer Nursery School, Vassar College, 70. Mitchell, Lucy Sprague, 111.

Montessori method, 13, 26, 52, 57, 74 et seq., 155 et seq., 208 et seq.

Motor development, 26, 51, 156, 190.

Muscles, development of, 24. Music, 65 ct seq., 70 et seq., 93 et seq., 97 et seq., 108; appreciation, 104 et seq.; period, 98 et seq.; instruments, 66 et seq., 100, 102 et seq.

Nap (see Rest and Sleep). Negative suggestion, 171. Negativism, 142, 144, 165 et seq. News (see Language period). Noah's Ark, 57.

North Bennett Street Industrial School, Boston, 70.

Nurse, 4, 16 et seq., 39, 189.

Nursery rhymes, 108.

Nutrition (see Dietitian and Food problems).

Order, habits of, 117 et seq.
Outdoor nursery school, 12.
Outdoor play, 69 et seq.
Overstimulation, possibility of,
2.

Parents, contact with school, 3 et seq., 6, 10, 12, 15 et seq., 160 et seq., 164 et seq., 185 et seq., 194, 198 et seq., 214; education, 3 et seq., 9, 11, 203 et seq. Pediatrician, 4 et seq., 16 et seq., 47, 189.

Personality studies, 192 et seq. Pestalozzi, Johann Heinrich, 209.

Pets (see Animals).

Physique, condition, 9; development, 23 et seq., 189, 210; examination, 18.

Plasticene (see Clay).

Play, development, 30 et seq., 76 et seq.; grounds, 12, 34 et seq.; room, 38.

Play materials, 1, 46 et seq., 156 et seq., 199 et seq., 203; arrangement of, 90; automobiles, 52; balls, 49; beads, 60, 87, 159; blocks, 52 et seq., 74, 76, 78 et seq., 88, 117 et seq., 159; boats, 79; clay, 58 et seq., 80, 85, 158 et seq.; climbing fence, 49 et seq.; crayons, 60, 74, 78, 87, 158; doll furniture, 55, 76 et seq.; dolls, 48, 54 et seq., 74, 77, 82 et seq.; giant strides, 50,

86; hammers, 47, 61, 89; hobby horses, 51, 90; jumping pit, 36; kiddy kars, 51, 76 et seq., 81, 87 et seq.; nails, 61; needles, 62; paints, 59, 61 et seq., 74, 89 et seq., 118, 158; paper, 60, 76, 78 et seq., 87, 158 et seq.; paste, 60, 78, 118; peg-boards, 60, 76, 78 et seq., 87, 159; pencils, 60; pictures, 64 et seq., 90, 158; puzzles, 57 et seq.; sand, 58, 74, 76 et seq., 83 et seq., 118 et seq., 159, 199; saws, 47, 61, 89; scissors, 47, 60, 78 et seq., 87, 158; scooters, 51; see saw (see Play materials, teetertotters); sleds, 51; slide, 50, 76 et seq., 86; stone tiles, 58; swing, 50, 78, 86; teeter-totters, 50, 76 et seq., 86; telephone toy, 49; tents, 35; trains, 52, 76 et seq., 89, 95, 117, 159; trapeze, 50, 86; trucks, 52, 88 et seq.; use of, 91; velocipedes, 51; wagons, 52, 77, 79; wheelbarrows, 52; wood, 61, 158 ct

Politeness, 95.

Posture, 24, 148 et seq., 173, 179.

Prekindergarten children, 1, 11 et seq.

Preparental education, 3 et seq., 8.

Principal, school, 15 et seq., 19. Private nursery schools, 2 et seq., 12 et seq., 16.

Program (see Schedule). Psychiatric training, 10, 16. Psychologist, 5, 191.

Public health, 17.

Pulse rate, 24.

Punishment, 171.

Purpose (sce Aims).

Rayon, for clothing, 177.

Records, food, 19; height, 17; music, 97; nursery school, 185 et seq.; play, 74, 76 et seq.; weight, 17.

Research, 11 et seq., 20; nursery school, 5 et seq., 13, 15; results, 73 et seq., 116 et seq., 133 et seq., 147 et seq., 173 et seq.; workers, 4.

Respiration rate, 24.

Rest, 1, 69 et seq., 150; (see also Sleep).

Rhythms (see Music).

Ring activities (see Group activities).

Roof, uses, 37 et seq.

Ruggles Street Nursery Training School, Boston, 9.

St. George's School for Child Study, Toronto, 148.

Schedules, 14, 68 et seq., 157, 210, 212.

Schoenhut Doll, 54.

School day, length of, 6, 13.

Self-expression, 1 et seq.

Self-help (see Independence). Sell, I. G., 175.

Settlement houses, 9.

Sewing, 62, 90.

Sex differences, 23 et seq., 74, 76 et seq., 86, 88 et seq., 136, 148, 174 et seq.

Shelter, 35.

Sickness, 9, 19; (see also Contagious diseases and Medical supplies).

Silk, for clothing, 176 ct seq.

Singing (sec Music).

Skills, development of, 158 et seq.

Sleep, habits, 2, 25, 69 et seq., 147 et seq., 191, 195, 210; prob-

lems, 152 ct seq., 161, 165; room, 39, 42 et seq., 150 et seq. Social habits, 2, 29 et seq., 75 et seq., 82, 84, 87, 95, 140, 155 et seq., 192, 196, 200, 211 et seq.

Social service nursery schools, 9 et seq., 182 et seq., 200.

Social service training, 16.

Sociologist, 5.

Songs (see Music).

Special ability, 57, 190 et seq., 202.

Staff, 7 et seq., 14 et seq.

Staples, R., 34, 38.

Stolz, H. R., 134.

Stories (see Books and Language period).

Student assistants, 4.

Summer school nursery schools, 11.

Sunshine, 1.

Sweeney, M. E., 143.

Table manners, 144.

Table play, 87.

Take-Apart-Toy-Laboratory, 52. Teacher, 18, 20 et seq.; of early

grades, 4; training, 20. Teacher training nursery school, 7 ct seq., 16.

Teeth, 24.

Temperature, 1, 18, 151, 173, 189. Toilet equipment, 38 et seq., 45 et seq., 120 et seq.; (see also

Equipment).
Toilet habits, 2, 69 ct seq., 115
et seq., 195, 210; (see also

separate habits). Tools, 61, 158.

Tooth-brushing, 122 et seq.

Toys (see Play materials).

Transportation, 13.

Tuition, 9, 12 et seq.

220 INDEX

Types of nursery school, 5 et seq.; (see also separate types).

Unification, 208, 213 et seq. University of Chicago Nursery School, 10.

University of Minnesota Nursery School, 6, 71, 76, 81, 87 et seq., 111, 116 et seq., 125, 135 et seq., 147 et seq., 168 et seq., 174, 202.

Vassar College nursery school, 70.

Visitors, directions for, 202. Vocabulary (see Language).

Wagoner, L. C., 174 et seq. Wall, hangings, 40.

Washington Neighborhood House Nursery School, Minneapolis, 71.

Water play, 59, 89.

Weight, 17, 23; (see also Records).

Windows, 40.

Wool, for clothing, 176.

(1)